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AUTHOR Winkeljohann, Rosemary, Comp.
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ABSTRACT

This selective bibliography is one of nine documents compiled to provide titles and descriptions of useful and informative reading documents which were indexed into the ERIC system from 1966 to 1974. The 231 entries in this section of the bibliography concern tests and evaluation and are arranged alphabetically by author in one of the following thirteen subcategories: reading diagnosis, achievement tests, informal reading inventory, rating scales, reading skills, cloze procedure, predictive ability, performance criteria, bilingual, language skills, learning disabilities (exceptional children), evaluation techniques, and program evaluation. Author and subject indexes conclude the document. (JM)

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A Selective Bibliography of ERIC ABstracts for the Teacher of Reading, 1966-1974;
VII. Tests and Evaluation

Compiled by

Sr. Rosemary Winkeljohann

National Council of Teachers of English

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ERIC Clearinghouse on Reading and Communication Skills
1111 Kenyon Road, Urbana, Illinois 61801

Published September 1976

ERIC Clearinghouse on Reading and Communication Skills
1111 Kenyon Road, Urbana, Illinois 61801

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Introduction

One of the primary goals of the National Institute of Education and the Educational Resources Information Center (ERIC) is to transform the information found in the ERIC system into a format that will be useful to the classroom teacher, the administrator, and the curriculum developer. Such is the goal of this bibliography, which brings together titles and descriptions (abstracts) of useful and informative reading documents that were indexed into the ERIC system during the years from 1966-1974.

Using the descriptors Reading, Reading Research, and Reading Instruction, a computer search was made of the ERIC data base. Of the 5000 documents that were obtained through the search, 3000 entries were in the system at Level I or Level II, that is, were available on microfiche or in hard copy, a photographically reproduced, paper booklet. Each of these 3000 entries was considered for inclusion in the bibliography.

To aid in the selection of items for the bibliography, nine criteria were developed:

1. The study contributes to the profession through the use of constructive research procedures.
2. The information adds to current understanding of the reading process.
3. The document helps the teacher with realistic suggestions for classroom practices.
4. The study indicates trends for the teaching of reading; organizational patterns; methodology; and/or materials.
5. The document helps teachers to apply theories of learning to the teaching of reading.
6. The study clarifies the relationship of reading to other disciplines, such as linguistics and psychology.
7. The study leads to understanding special problem areas in teaching reading.
8. The document helps teachers to build curriculum or gives guidance in planning

lessons.

9. The document will help readers to understand the state of the profession or the professionalism in the teaching of reading.

The criteria were reviewed and refined by Robert Emans, University of Maryland; Robert Bennett, San Diego (California) School District; Richard Hodges, University of Chicago; William Powell, University of Florida at Gainesville; Charles Neff, Xavier University; and Joanne Olsen, University of Houston.

In order to be included in the bibliography, a document had to meet at least four of the nine criteria. Of the 3000 documents evaluated, 1596 were able to satisfy the requirements and were included. This section of the bibliography, Tests and Evaluations, has 231 entries. Other categories are:

1. Reading Process (280 entries)
2. Methods in Teaching Reading (190 entries)
3. Reading Readiness (131 entries)
4. Reading Difficulties (115 entries)
5. Reading Materials (245 entries)
6. Adult Education (201 entries)
7. Reading in the Content Area (94 entries)
8. Teacher Education (109 entries)

Subcategories were organized within each major category, and items were put into alphabetical order by author. Entries were then given numbers consecutive throughout the nine separate sections, and an author index and a subject index were prepared for each section. The subject indexes were prepared using the five major descriptors which were assigned to each document when it was indexed into the ERIC system. In both the author and the subject indexes, each item is identified by its ED (ERIC Document) number and by the consecutive number assigned to it in the bibliography.

Two other bibliographies are available which reading educators may find useful. They differ from this bibliography in that they are comprehensive rather than selective. Both of these publications include all the reading documents entered into the ERIC system by ERIC/RCS and by ERIC/CRIER. They are Recent Research in Reading: A Bibliography 1966-1969 and Reading: An ERIC Bibliography 190-1972; both were published by Macmillan Information.

TESTS AND EVALUATION

I. Reading Diagnosis

II. Achievement Tests

III. Informal Reading Inventory

IV. Rating Scales

V. Reading Skills

VI. Cloze Procedure

VII. Predictive Ability

VIII. Performance Criteria

IX. Bilingual

X. Language Skills

XI. Learning Disabilities (Exceptional Children)

XII. Evaluation Techniques

XIII. Program Evaluation

1163. The Achievement of Disabled Readers (1969-71 School Years) Based on Comparison of Pretest and Posttest Scores. Valparaiso, Ind.: Northwest Multi-Service Educational Center, 1971, 65p. [ED 064 689]

The objective of this project was to examine the achievement scores of disabled readers. Raw scores of pretest and posttest of the same pupil were computed in terms of percent gain or loss, and a second method shows the ratios of grade levels and instructional reading levels on pretest and posttest of the same pupil. The pupils from 32 public and nonpublic school corporations were prepared for a random smapling of 752 pupils who had been pretested earlier. From these schools the diagnosticians posttested 118 pupils. Conclusions from the data are that (1) of the 114 usable posttest pupils, 111 pupils showed gain and only three showed a loss (the failure pattern has been interrupted in over 90 percent of the cases); (2) the average case gained 1 1/2 years of reading growth in twelve months of elapsed time; (3) by grouping the cases into assigned grade level at the time of posttest, the data indicates good growth within each grouping; and (4) reading among disabled readers is improving throughout Northwest Indiana schools.

1164. Bagford, Jack. Building Strength in Word Attack. Paper presented at the Annual Meeting of the International Reading Association, Detroit, May 10-13, 1972, 6p. [ED 063 594]

This paper offers suggestions in the form of six guidelines on how the teacher can build toward reading maturity in the classroom. The first guideline urges the teacher to remember that reading necessitates a total complex thinking process, one which will prevent persisting at one level of instruction longer than is necessary. Secondly, students should be encouraged to read at levels appropriate for them and be engaged in activities that will involve them in a greater percentage of actual reading. Furthermore, to keep students from comparing themselves with each other, the teacher should define success so that students have a sense of achievement derived from their individual rates of progress. At the same time, the class should be told the reason for a given activity so that it can share responsibility for learning with the teacher. Another guideline stresses the importance of the language experience approach (e.g., relating reading to real life problems), so that students can use their everyday environment to generate their own reading, and look to books as a means by which they can solve some of their problems. It is hoped that with the direct application of these various guidelines, day-to-day decisions about specific methodologies can be more effective and consistent, and reading skills strengthened.

1165. Barrett, Thomas C., ed. The Evaluation of Children's Reading Achievement. Perspectives in Reading, No. 8. Newark, Del.: International Reading Association, 1967, 141p. [ED 025 396.

Document not available from EDRS. Available from International Reading Association ($3.50 nonmember, $3.00 member)]

Ways that reading evaluation programs can bring reading success to individual students are presented. Each chapter is written by an authority on one of the following topics: what evaluation is, who does it, and when it should be done; reading program goals as the basis for evaluation; informal techniques for assessing prereading behavior; use of reading readiness tests for prediction and diagnosis; selection and use of survey reading achievement tests; values and limitations of diagnostic reading tests for classroom evaluation; informal reading inventories as a means of improving instruction; teachers' questions and levels of reading comprehension; evaluation of the affective dimension of reading. References are included after each article.

1166. Bernstein, Margery R. Unbrella for Reading: Evaluation of Inservice Education on Reading. Mamaroneck, N.Y.: Mamaroneck Public Schools, 1972, 32p. [ED 064 688]

Primary teachers, aides, and volunteers participated in an inservice training program based on prerequisites of reading, teaching materials and techniques, diagnostic tests of reading skills, beginning reading, and developing comprehension. Evaluative procedures included (1) a pretest and posttest on factual content; (2) showing videotape of a diagnostic study and selecting five areas in need of remediation from a list of ten; (3) from a list of 25 items selecting five that best suited the child described; (4) computing readability; (5) preparing a case study; (6) administering pre and post attitude and interest inventories; and (7) reports on aides and volunteers. It was concluded that the program was successful in achieving objectives related to (a) knowing prerequisites for a reading task, (b) using diagnostic tests and assessing reading difficulties, (c) selecting appropriate methods and materials for a given child, (d) judging the difficulty of a passage, and (e) helping aides and volunteers were achieved. Appendices are included for procedure, methods, and materials used.

1167. Burnett, Richard W. Basic Reading Inventory, Form A (and) Adult Basic Reading Inventory, Form A, Manual of Directions (and) Technical Report No. 1, Basic Reading Inventory. Bensonville, Ill.: Scholastic Testing Service, 1966. [ED 019 548. Document not available from EDRS. Available from Scholastic Testing Service, Inc., Bensonville, Ill. 60106]

The Adult Basic Reading Inventory is designed for use with any age group for immediate identification of the individual's capability for learning to read. Potential strengths and weaknesses are established to aid in the proper assessment of reading materials for use in both individual and group instruction. The manual offers directions for test administration and interpretation of test results, and an overview of the reading learning process to aid the instructor in building an effective literacy program.

Originally developed under the sponsorship of the Adult Education Department of the Illinois Superintendent of Public Instruction, the inventory can be used in all basic adult education programs. This document includes the Adult Basic Reading Inventory Form A and Manual of Directions, and a technical report which gives correlations of the basic reading inventory with other measures of reading ability--Kuder-Richardson, California Reading Test, Gates Advanced Primary Reading Test, and Gates Grade Equivalent Scores.

1168. Carter, Homer L.J. Determining Consequential Factors in Diagnosis. Paper presented at the Annual Meeting of the International Reading Association, Boston, April 24-27, 1968, 16p. [ED 026 207]

The acts of diagnosis described in this paper aid in the determination of relevant, material, and consequential factors in a clinical study. These acts, which are not necessarily sequential, are identification, assumption, rejection, acceptance, discovery, explanation, prediction, and verification. The clinician with this model in mind will be able to determine more objectively what is relevant, material, and consequential. Insignificant details can be swept aside, and a clear-cut sequence of factors leading to the disability can become apparent. All of this should be completed before treatment and instructional measures are initiated. An illustrative case study is reported.

1169. Cohen, S. Alan. Diagnosis and Treatment of Reading Difficulties in Puerto Rican and Negro Communities. New York: Mobilization for Youth, 1964, 7p. [ED 002 479]

Reading disabilities are divided into three categories--those caused by perceptual factors, those caused by psychosocial factors, and those caused by psychoeducational factors. Poor development of visual perception constitutes a disproportionate percentage of learning disability among Negroes and Puerto Ricans in central cities. Early childhood programs in visual perception development should be developed. The psychosocial environment of disadvantaged youngsters breeds lethargy and aggression. Such students lack the training that makes a middle-class child enjoy finishing a project and that builds up frustration tolerance. They are easily defeated, and, without middle-class models to emulate, their aspirations are low. School represents to them a value system that threatens them or that bores them with its detachment from their reality. Psychoeducational factors have become apparent through experimental testing of disadvantaged children. The reliability of standardized tests is low, but school reading ability can be measured with tests designed specifically for the disadvantaged population. Disadvantaged Negro and Puerto Rican children have trouble moving from the printed word to the heard or spoken word to the experience. They lack training in recognizing similarities and differences, structure and no structure, organization and disorganization. They lack concepts of time or chronology. They lack concepts for words, and when they are familiar with a concept, they lack the words that symbolize it. These children need to be taught what they have not learned to do; they need to be taught the alphabet, to hear sounds in words, and to associate sounds with phonograms. Teachers should present, sequentially and thoroughly, every fine, specific behavior necessary for children to be able to read.

1170. Cox, Richard C.; Boston, M. Elizabeth. Diagnosis of Pupil Achievement in the Individually Prescribed Instruction Project. Working Paper 15. Pittsburgh: University of Pittsburgh Learning Research and Development Center, 1967, 41p. [ED 023 296]

This study, sponsored by the U.S. Office of Education, looks at diagnostic instruments of the individually prescribed instruction (IPI) program, which measure pupil achievement in the IPI learning continuum. The IPI system employs the instructional unit to define progress in mathematics, reading, and science. At the start of a school year, placement tests are administered to start the pupil in appropriate learning exercises. Unit pretests provide mastery criteria for objectives within a unit of work and help the teacher know what lesson material to prescribe for the pupil. Posttests measure the pupil's mastery of unit concepts after he has completed his assigned tasks. For each instructional unit, there is one pretest and one posttest. Curriculum-embedded tests (CET) indicate when a pupil has learned a particular skill within a unit of work. The teacher plans the pupil's learning sequence and monitors his progress with the aid of these four kinds of tests. Examples of the tests and models for their use are included.

1171. Diagnostic Tests in Reading: An Annotated Bibliography. Albany: New York State Education Department, Bureau of Pupil Testing and Advisory Services, 1970, 61p. [ED 073 426]

This publication lists and describes diagnostic reading tests available from United States publishers. Critical reviews by outside experts are included and supplemented by the compiler's comments. The external reviews are abstracted from "The Mental Measurements Yearbooks," edited by O.K. Buros, and cited by yearbook edition and entry number. The introductory material serves two purposes: (1) to outline some considerations to be followed in selecting diagnostic tests, and (2) to provide background for the understanding of technical information provided in test manuals and reviews.

1172. Dietrich, Dorothy M. A Diagnostic Approach to Corrective Reading in the Classroom. Paper presented at the Annual Meeting of the International Reading Association, Detroit, Mich., May 10-13, 1972, 6p. [ED 063 576]

To meet the needs of students reading below their potentials, teachers must learn more about the reading process, become more diagnostic in determining pupils' strengths and weaknesses, and couple their knowledge of reading with an understanding of pupil deficiencies to plan a program to improve the child's ability to read. Diagnosis, though important, cannot consume most of the teacher's time. At the beginning of the year the teacher may ascertain a child's instructional reading level by consulting school records and by administering informal reading inventories and teacher-made exercises. Further, the child's basic area of weakness should be assessed, though his strong skills should be utilized in improving weak areas. During ensuing learning experiences, notations about the pupil's reading performance should be made, perhaps on 3 x 5 cards for periodic summary on a profile card. Teachers hesitant about full commitment to complete individualization can increase the flexibility of their instruction by offering a considerable number of independent activities for the majority of the class, freeing themselves to work with smaller groups. All pupils deserve opportunities to spend time in reading widely--regardless of their reading proficiency.

1173. Ellinger, Bernice D.; and others. Development and Refinement of a Test of Critical Reading Ability of Elementary School Children. Columbus: Ohio State University School of Education, 1967, 31p. [ED 018 335]

The Ohio State University developed a critical reading test as part of the three-year USOE Project 2612 conducted to determine whether critical reading could be taught to elementary school children. The test aims to measure the analytic and evaluative abilities of children in reacting critically to materials read. Critical reading skills were identified, listed, and validated by fourteen reading experts across the country. Revised accordingly, the list was presented in classrooms where additional critical reading skills were observed. Trial forms developed were given to a national sample. Item analysis of the results yielded items for the three final forms which were again subjected to item analysis. Results are presented in several tables. Factorial analysis was still underway at the time of this report, so results are not reported here. Sample items of the three forms are given. The test is available for use as a diagnostic or achievement instrument.

1174. Farr, Roger. Reading: What Can be Measured? Bloomington: Indiana University, 1969, 305p. [ED 033 258. HC not available from EDRS. Available from International Reading Association]

Research literature on measurement and evaluation in reading is described under six chapter headings: measurement in reading; general perspectives; problems in measuring reading sub-skills; methods for assessing reading achievement; assessing growth; measurement of reading-related variables; and a summary of tests uses and research needs. Following each chapter is an extensive list of references. In addition to these chapters, there are (1) a guide to tests and measuring instruments in reading which describes tests currently in print, and lists publishers, (2) a glossary of terms, (3) an index to Buros' "Reading Tests and Reviews" and to the "Mental Measurement Yearbooks," and (4) an index to "Published Research Literature in Reading" which provides a reference to research articles (in the ERIC/CRIER system) that have reported use of the tests described in the guide to tests and measuring instruments in reading. The monograph presents a wide range of measurement problems in reading, and, in doing so, raises some critical issues concerning the reading process and instructional practices in reading. Particularly valuable are the guidelines for the classroom application of research.

1175. Fisher, Joseph A. Diagnostic and Screening Instruments: Tests and Devices for Assisting College Reading Skills. Paper prepared for the Seminar for Directors of College and University Reading Centers, Annual Meeting of the International Reading Association, Anaheim, Calif., May 6-9, 1970, 9p. [ED 045 287]

Although it is frequently assumed that students who meet college entrance requirements have mastered basic reading skills, the presence of so many college reading and study skills centers argues that such is not the case. Many college students need help with some basic skills. To provide such help, careful diagnosis of individual abilities is needed. This diagnosis should be thorough including standardized tests, informal reading tests, and speech, hearing, and vision tests. It is important to note that each of these evaluative measures has certain advantages and disadvantages. These should be kept in mind so that the measures can be used with maximum efficiency. The diagnostician should couple the information he gets from tests with information he has gathered from students' records. Finally, he should be able to prescribe possible sequences of instruction based on the skill needs of the individual, as discovered through diagnosis. A bibliography is included.

1176. Geis, Robley. The Prediction and Prevention of Reading Failure. Ed.D. Dissertation, University of Southern California, 1971, 163p. [ED 067 620. Document not available from EDRS. Available from University Microfilms (Order No. 72-11, 923)]

This study sought to determine whether it is possible to predict at the end of kindergarten those pupils who will not succeed in achieving stipulated norms for reading in the first grade, and if a summer intervention program could contravert predicted reading failure. Failure was identified as a score below the 25th percentile on the Stanford Achievement Test in Reading. Control and experimental groups were established by random selection from the sixty children ranking lowest on the Bender Visual Motor Gestalt Test, and scoring below the 50th percentile on the Metropolitan Readiness Test. The results showed that seventeen of the twenty members of the control group scored below the 25th percentile on the Stanford Test. Correlations and multiple correlations involving the Bender, the Metropolitan, age, sex, and IQ indicated that the Bender was the best predictor of reading failure. Reading scores of the experimental and control groups were compared to determine the effect of the intervention program. Fifteen of the experimental group members outscored their control group mates.

1177. Gengler, Charles. An Inventory of Reading Skills. Salem, Oregon: Oregon Association for Supervision and Curriculum Development, 1972, 17p. [ED 064 693]

The skills listed in this booklet may form the base guideline for organizing the total school reading program or for individual classroom teachers. Several reasons are listed for constructing a reading program around a sequential listing of skills: (1) an orderly arrangement, (2) diagnosis, (3) blueprint for organizing flexible groups, (4) goal setting, (5) teacher's personal growth, (6) awareness of areas of reading instruction, (7) record keeping for students and teachers, (8) reporting to parents, and (9) transfer of records. The skills are arranged in general areas: auditory and visual discrimination, word attack skills, skills of organizing and recording, and miscellaneous reading skills. Within each of the six general areas, skills are ordered from easy to difficult. The easier skills normally denote those developed at an earlier age; difficult skills denote those developed at a later age.

1178. Goodwin, Delton D. Measurement and Evaluation in Junior College Reading Programs. Washington, D.C.: American Association of Junior Colleges; Los Angeles: University of California, ERIC Clearinghouse for Junior College Information, 1971, 4p. [ED 053 714]

This research review mentions that although few tests are designed specifically for junior colleges, 85 percent of junior college reading programs use standardized reading tests for diagnostic purposes. Many colleges require that students who score below a predetermined level on college placement or reading exams be placed in developmental or remedial classes. Computers are often used to find students with reading difficulties and place them in appropriate classes. The range in reading ability in junior colleges is often ten or more levels. This spread in abilities and interests of students makes it necessary to have multi-level instruction in class. Each student is assigned a starting level and proceeds at his own rate through a reading-skill sequence. Because reading is an individualized matter, a uniform measure cannot be used to evaluate performance. Students should try to evaluate their own reading performance through the educational objectives set up for them. Special classes for deaf, illiterate, or adult students are usually restricted. The four standardized tests most often selected by junior college reading instructors are the Nelson-Denny Reading Test, the Iowa Silent Reading Test, the California Reading Test, and the Cooperative Reading Test.

1179. Hayward, Priscilla. Evaluating Diagnostic Reading Tests. Newark, Del.: International Reading Association, 1968, 6p. [ED 027 144. Document not available from EDRS]

Two types of diagnostic reading tests are described--tests of phonics skills, and tests of work-study or critical reading ability.

The following criteria for evaluating these tests are suggested: (1) an analysis of the methods used in measuring the component skills and the validity of subscores in designating areas for remedial instruction (the user must know what skills the pupil is expected to demonstrate), (2) an analysis of the reliability coefficients of the subscores (these must be above .90 for individual use), and (3) an analysis of the intercorrelations among subtests (these must be below .65 to warrant differential diagnosis). Because diagnostic tests are used primarily as a means of intra-individual diagnosis, accompanying test norms are not mandatory. The necessity of utilizing knowledge of a child's intelligence scores, scholastic ability, listening comprehension, and arithmetic computation, as well as his diagnostic test scores in planning a remedial program, is emphasized.

1180. Index and Short Description of All Tests. New York: New York Medical College, 1960, 37p. [ED 001 900]

The Institute's test battery is intended to assess the child's achievement in cognitive style, perceptual ability, language development, and reading achievement. The two major phases in the Institute's research program are exploration of early environmental factors, and the development of school remedial, reading, and enrichment programs. The index classifies each test, and gives stages of development and a short identifying description. A list of specific standard tests available for use follows. A short description of tests gives the purpose and method for each type. The tests are organized under seven categories: (1) social classification and behavioral evaluation, including appraisal scales to measure behavior which may affect scores in test and interview measures used to establish socioeconomic level; (2) verbal tests, which obtain samples of children's speech and relate verbal behavior to perceptual, cognitive, and cultural factors; (3) perceptual tests, which are used to assess sensori-motor relationships and to investigate factors potentially underlying success in learning to read; (4) cognitive tests, which assess factors related to school achievement, intelligence, and nonverbal intellectual performance; (5) dominance laterality tests, which investigate factors implicated in the literature on reading and speech disabilities; (6) auditory-visual tests, which are concerned with modality preference and modality efficiency, and which may be related to adequacy of reading and to the type of enrichment program best for the individual child; and (7) reading, achievement, diagnostic and prognostic tests, which are designed to show the child's abilities, including his general reading level, as specific skills important in maintaining that level.

1181. Jan-Tausch, Evelyn. Reading Diagnosis--The Essential Ingredient in Teaching Every Child to Read. Paper presented at the Annual Meeting of the International Reading Association, Anaheim, Calif., May 6-9, 1970, 10p. [ED 041 709]

This paper stresses the need for training teachers in language abilities evaluation techniques that can be utilized in the practical classroom setting, and presents a schema, described by Marion Monroe, which enables the teacher to chart each pupil's language pattern on one of five sequential levels in the areas of expressiveness, meaning, sentence structure, word meaning, and speech qualities. It is suggested that in "knowing the learner," the teacher must identify the stage of language development of the child, the emulative home models he might have, his motivation, the effectiveness of his sensory modalities, and other outside factors which affect his school performance. Five sequential steps in the reading process are listed. However, the distinction between the basic reading act and its application to situations requiring one's ability to think is made, and it is suggested that competent diagnosis would reveal that not further instruction in the process of reading but more pertinent learning experience in the development of concepts is needed. References are included.

1182. Johnson, Marjorie Seddon; Kress, Roy A. Information Reading Inventories. Reading Aids Series, No. 2. Newark, Del.: International Reading Association, 1965, 42p. [ED 072 437. Available from EDRS. Also available from International Reading Association: ($2.00 nonmember, $1.75 member)]

Techniques for developing and using informal reading inventories are listed. Concepts and purposes of the inventory are suggested, and reading levels are defined. Suggestions are offered for individual and group inventories, material preparation and analysis, question formation and selection, methods of scoring and recording, and methods of evaluation. A bibliography is included.

1183. Klosterman, Sister Laurietta. The Effectiveness of a Diagnostically Structured Reading Program for Fourth Grade Pupils Using Students Majoring in Elementary Education as Tutors. Dayton, Ohio: Dayton University, 1968, 127p. [ED 028 910]

During a six-month period, 90 fourth-grade pupils were tutored in reading by elementary education majors as part of their regular classroom instruction. Work was done individually or in small groups four days weekly for one hour per tutoring session, and all materials used were on each child's instructional reading level. A control group of 90 pupils received the regular classroom instruction only. The study concluded through one-way analysis of variance that tutoring significantly increased the gains in vocabulary, comprehension, and total reading achievement for the combined tutored groups. Individualized tutoring proved more effective than small group tutoring. The program was also considered valuable for teacher education. Weekly progress reports, views of tutoring, samples of diagnostic and evaluative reports, and materials used for tutoring are presented in appendixes. References are included. This study was sponsored by the Bureau of Research of the U.S. Office of Education.

1184. Leibert, Robert E., ed. Diagnostic Viewpoints in Reading. 1971, 133p. [ED 068 916. Available from EDRS. Also available from International Reading Association ($4.00 nonmember, $3.00 member)]

This collection of papers represents a variety of views on diagnosis and/or on the manner in which diagnostic information is interpreted. The papers have been arranged into three sections. The first deals with the importance of diagnosis, presents some methods for collecting and interpreting data about reading progress, and describes a plan for bringing about changes in reading performance. The second section treats tests and testing and provides information on ways a teacher can use tests. Included are an analysis of several diagnostic tests currently available, a discussion of problems and solutions in utilizing both standardized and informal tests, and a description of the development of a diagnostic test. Section three is composed of four reports analyzing data to shed light on the relation between intelligence and reading improvement, the stability of reading achievement, and critical evaluations of methods for determining levels of achievement. The papers are arranged in a way that makes the monograph easy to use, especially the treatment of the statistical studies. Tables and references are included.

1185. Lloyd, Bruce A. Building Word Recognition Abilities. Paper presented at the Annual Meeting of International Reading Association, Detroit, Mich., May 9-13, 1972, 7p. [ED 063 094]

A major purpose of reading evaluation is to help the classroom teacher organize an instructional approach consisting of a closely knit system of skills, experiences, principles, and processes. Reading evaluation should have a three-dimensional emphasis. The first dimension should focus on new knowledge uncovered through basic and applied research studies. The second dimension should provide opportunities for teachers to become fully involved in the evaluation process. The third dimension should determine if the breadth, depth, and scope are adequate for present and future needs in reading. Individualized reading instruction demands efficient and effective procedures for the use of classroom teachers in diagnosing reading needs and evaluating reading growth. Instructional technology has facilitated faster and more effective evaluation techniques.

1186. Malmquist, Eve. Studies on Reading Disabilities in the Elementary School. Paper presented at the Annual Meeting of the International Reading Association, Seattle, Wash., May 4-6, 1967, 22p. [ED 014 400]

A study was conducted to determine whether the frequency of reading disability cases could be markedly decreased (1) by a careful diagnosis of the child's reading readiness and general school readiness, and (2) by the establishment of an appropriate teaching situation for those children whose diagnosis indicated potential reading and writing difficulties. In 1958, a pilot study was begun with first graders and was continued through grade 3. Extensive information was obtained for each child through tests and parental interviews. Subjects whose diagnostic reports predicted that reading disability would result if no auxiliary measures were taken were given special help by a reading clinic teacher and by the classroom teacher. On reading tests given after the first, second, and third grades, experimental subjects achieved significantly higher scores. The main study followed a similar design using 466 control subjects and 472 experimental subjects. Eighty-three percent of the cases identified as potential reading disability cases were prevented. The prognostic values of the predictors used, the stability of different types of criteria, and the effects of remedial teaching are discussed.

1187. Milchus, Norman J. A Study of the Effects of First Grade Prescriptive Teaching Based on Weaknesses Diagnosed by Kindergarten Prereading Tests. Final Report. Detroit: Wayne County Intermediate School District, 1971, 117p. [ED 062 106]

The Wayne County prereading program for preventing reading failure is an individually, diagnostically prescribed, perceptual-cognitive-linguistic development program. The program utilizes the largest compilation of prescriptively coded, reading readiness materials to be assigned prior to and concurrent with first-year reading instruction. The Wayne County prereading test's eight subtests determined the assignment of appropriate materials, lessons, and games. The DeHirsch Predictive Index, on which the prereading test was patterned, was also given. The first graders in three experimental and three matched control schools were sampled and compared on reading achievement at the end of the first grade with standardized reading tests. Factor analysis was used to reduce the number of teacher and classroom variables. The hypothesis that the Wayne County prereading program would increase reading achievement at the end of the first grade was confirmed. The Wayne County prereading test with the self-concept and motivation inventory (SCAMIN) exceeded the predictability of the DeHirsch Predictive index. All of the subtests of the prereading test were significant contributors to the regression equations except categories. Word recognition I and II, word matching, word reproduction, and reversals were the highest and most consistent predictors along with achievement from SCAMIN. Tables of data, sample tests, and references are included. This study was sponsored by the Bureau of Research of the U.S. Office of Education.

1188. Moody, Barbara J., ed.; and others. Recipes for Reading: A Teacher's Handbook for Diagnostic and Prescriptive Teaching, or The Reading Teacher's "Cookbook." Winsted, Conn.: Cooperative Educational Services Center, August 1968, 434p. [ED 027 152]

A coding system for categorizing reading skills was developed in order to provide manuals for each grade level (preprimer through six) that would aid teachers in locating materials on a particular skill by page number in a specific text. A skill code key of the skills usually taught at a given reading grade level is based on specific basal test items from the Ginn, Houghton-Mifflin, and Scott, Foresman basal reader tests. These skill code numbers are then used on corrective resources listings (for fourteen publishers of basal readers which provide information location for all skills coded in the unit. A sample diagnostic grouping sheet and skill coding sheets assist teachers in grouping students for instruction. A list of student recreational reading materials is given, and supplementary instructional materials and suggested games and activities are provided for each grade level. A professional reading list is included. This research was supported under Title III of the Elementary and Secondary Act.

1189. Mour, Stanley I. Evaluation of Reading in the Classroom. Interpreting the Results of Standardized Tests. Paper presented at the Annual Meeting of the International Reading Association, Seattle, May 4-6, 1967, 9p. [ED 014 384]

If it is recognized that the sole justification in giving a test is to obtain a better understanding of the child, factors that influence the child's performance on the test must be considered in the interpretation of test results. A sufficient knowledge of the child's development, his background, his perception of the test situation, and the amount of knowledge and skills he brings into the test situation would help the teacher differentiate between and understand the child who does not perform because he cannot and the one who can perform but would not. The teacher should consider every aspect of the test--what it can measure, the test items themselves, the cultural basis of the test, the kind of environment it creates, the statistical aspects, and how the test would contribute to a deeper understanding of the child. While considering all these factors in the interpretation of results, the teacher should remember to interpret to each child the purpose of the test, what the test scores mean, and how these are going to be used.

1190. Pellegrine, R.J. The Diagnostic Reading Test, Survey Section, Form E: A Reliability Study. Paper presented at the National Reading Conference, St. Petersburg, Fla., December 3-5, 1970, 16p. [ED 049 890]

The diagnostic reading tests were designed to assess the reading skills of college students enrolled in reading centers. To assess the reliability of the Diagnostic Reading Tests, Survey Section, Form E (DRTE), a study was conducted with university freshmen as subjects. The DRTE was administered to 31 students in an educational opportunity program (EOP), to 122 students admitted to the Eastman School of Music of the University (ESM), and to 229 students who were regularly admitted to attend the summer orientation program (SOP) session. The DRTE was successful in differentiating between the three groups--the SOP group had the highest mean scores, as was expected; the EOP group had the lowest, with the ESM group somewhere in the middle. Reliability estimates of the DRTE using the Kuder-Richardson formulas 20 and 21 were found to be satisfactory, and did not differ from those published by the test authors. The fact that sixteen of the test items did not contribute significantly to the test score seemed to indicate that a revision of the test is needed. Tables and references are included.

1191. Plattor, Emma E.; Woestehoff, Ellsworth S. The Application of Computer Technology to Education Diagnosis. Paper presented at the Annual Meeting of the International Reading Association, Boston, Mass., April 24-27, 1968, 16p. [ED 028 025]

Effective instructional organization and sequences cannot be generated without analyzing and interpreting diagnostic information. Currently the teacher is required to provide the analysis and interpretation as well as the instruction. Class loads and time limitations preclude anything other than the cursory examination of data. In order to facilitate effectiveness and efficiency, a computer can assume the analysis function and free the teacher for careful interpretation and competent instruction. The utilization of a computer in educational diagnosis involves (1) identifying information categories requisite to educational diagnosis, (2) specifying category variables, (3) selecting instruments for obtaining data, (4) organizing files for data storage and retrieval, (5) developing a library of computer programs based on anticipated diagnostic procedures, (6) specifying data presentation format, and (7) translating the data into instructional sequences. Two exhibits of the application of computer technology to educational diagnosis are described and illustrated. Data tables are included.

1192. Purdy, Robert J.; and others. Reading Diagnostic Approaches. Los Angeles: Los Angeles City Schools, 1968, 39p. [ED 018 345]

A diagnostic kit designed to help classroom teachers diagnose reading difficulties more adequately and motivate pupils more effectively is presented. The suggestions are applicable to lower primary children. Diagnostic techniques are outlined for subjective and objective observation of language ability, visual perception skills, auditory discrimination, and directional skill. Suggestions for formal and informal assessment of oral reading, word attack, personality, and home background are included. Remedial techniques for dealing with persistent reading difficulties are presented in detail. High interest, low vocabulary books are listed with grade levels. A bibliography is provided.

1193. Sawyer, Rita. Diagnosis for the Classroom Teacher. Paper presented at the College Reading Association, Knoxville, Tenn., April 4-6, 1968, 10p. [ED 029 754]

The role of the classroom teacher as a diagnostician is described. Since the purpose of reading diagnosis is to ascertain the probable potential of each student and to determine what his instructional needs are and where to begin instruction, extensive individual testing is neither possible nor recommended for the classroom teacher. However, reading expectancy, self-concept, and motivation can be determined from teacher observation and school record analysis. Also, the best instrument available to the classroom teacher for obtaining information about groups of children is the standardized test. The uses, advantages, and disadvantages of a group standardized test for screening and grouping pupils are discussed. Some guidelines for analyzing and comparing subtest scores to obtain diagnostic information and for interpreting test behavior are given.

1194. Short, N.J. PIC Reading and Spelling Diagnostic Test Form. Minneapolis: Minneapolis Public Schools, 1971, 28p. [ED 060 029. Document not available from EDRS]

This diagnostic skills checklist enables the methods and materials specialists to note the reading and spelling skills the child has mastered, those skills which are weak or not developed, and those skills which are clearly beyond the child's capability of mastering because of insufficiently developed abilities at lower, prerequisite levels. Also identified are tests which have been administered to the child during the evaluation period. See also TM 001 111 for a description of the Regional PIC program.

1195. Short, N.J. PIC Reading Readiness Test Form. Minneapolis: Minneapolis Public Schools, 1971, 6p. [ED 060 030. Document not available from EDRS]

This rating form concerns the measurement of basic skills in connection with assessing reading readiness. Motor skills, ability to adjust to learning situations, familiarity with the alphabet, and general knowledge are assessed. See TM 001 111 for details of the Regional PIC program in which it is used.

1196. Slobodzian, Evelyn B. Use of the Illinois Test of Psycholinguistic Abilities as a Readiness Measure. Paper presented at the Annual Meeting of the International Reading Association, Boston, Mass., April 24-27, 1968, 10p. [ED 020 081]

The Illinois Test of Psycholinguistic Abilities, a test designed for children aged 3-9, is of value to the kindergarten or first-grade teacher in diagnosing for the purpose of remediation, especially in communities where disadvantaged areas exist. From its use, the teacher can determine background inadequacies, differences between the level of a child's ideas and his ability to express them, deviations in auditory and visual abilities, degrees of self-confidence in language usage, differences in hearing and speaking vocabularies, and articulation problems. Test results allow the teacher to create programs that develop reading readiness on the basis of individual needs.

1197. Strang, Ruth. Reading Diagnosis and Remediation. Bloomington: Indiana University, ERIC Clearinghouse on Reading; Newark, Del.: International Reading Association, 1968, 204p. [ED 025 402. HC not available from EDRS. Available from the International Reading Association]

This monograph includes an extensive review and evaluation of the research literature and offers teachers and clinicians background for understanding reading diagnosis, the correlates and causes of reading disabilities, diagnostic techniques, and remediation. The following topics are discussed: (1) the nature and levels of diagnosis, (2) the characteristics and conditions related to reading achievement and disability, (3) severe reading disabilities, (4) diagnostic techniques, (5) diagnosing special groups, (6) remediation, and (7) trends, needs, and future directions in diagnosis and remediation. There is a growing emphasis on early diagnosis, differential diagnosis, behavioral approach, perception, and learning modalities. However, teachers and clinicians must be helped to improve their competence in using diagnostic instruments and results, in observing student behavior, and in selecting the most appropriate teaching and guidance procedures. Self-diagnosis through introspective-retrospective verbalization should be encouraged. More extensive case studies and more research on the effectiveness of certain teaching procedures with certain individuals under certain conditions should be conducted. This monograph is accompanied by an extensive bibliography and a list of reading tests.

1198. Wark, David M. An Automated Individualized Diagnostic for College Centers. Paper presented at the College Reading Association, Knoxville, Tenn., April 4-6, 1968, 13p. [ED 026 203]

A self-diagnostic system called the Automated Individualized Diagnosis System (AID) tested at the Reading and Study Skills Center, University of Minnesota, was designed to replace the human counselor. It consists of an answer sheet, a self-analysis profile blank, and an audio tape which helps the student derive his reading profile and select the practice materials he needs. Three trials conducted showed that the system had no adverse effect on the length of contact the students had with the reading program. The students were generally satisfied with the system's efficiency in giving specific information on profiling reading ability and using this profile as the basis of diagnosis and remediation. However, they felt that the presence of a human counselor would add warmth, friendliness, and a feeling of security. Like other automated instructional systems, the aid fails in the affective domain.

1199. Wilson, Richard C. Using Individualized Reading as a Diagnostic Technique. Paper presented at the Annual Meeting of the International Reading Association, Boston, Mass., April 24-27, 1968, 7p. [ED 020 079]

The identification and rectification of personal reading needs through individualized reading procedures are discussed. The shift of corrective reading from group to individual needs is urged. Remediation should begin with topics agreeable and enjoyable to the learner. Through pupil conferences and an informal reading inventory using this type of material, remediation and skill growth can be directed and motivated toward personal satisfaction. Continual diagnosis of needs is dependent on detailed anecdotal records concerning pupil interests, free reading, and a skill building profile. Sharing the findings with each child, his parents, and other professional staff members is recommended as a possible aid to healthy improvement of skills and sympathetic understanding of disabilities. References are listed.

1200. Winkley, Carol K. What Do Diagnostic Reading Tests Really Diagnose? Paper presented at the Annual Meeting of the International Reading Association, Anaheim, Calif., May 6-9, 1970, 27p. [ED 043 452]

A study was made of nine reading tests, including both group and individually-administered measures, which are claimed to be chiefly diagnostic. Instruments analyzed were the following: Silent Reading Diagnostic Tests (Bond, Balow, and Hoyt), Botel Reading Inventory, Durrell Analysis of Reading Difficulty, Gates-McKillop Reading Diagnostic Tests, McCullough Word Analysis Tests, Roswell-Chall Diagnostic Reading Tests, Diagnostic Reading Scales (Spache), and levels I and II of the Stanford Diagnostic Reading Test. Examination of the nine diagnostic batteries revealed subtests for (1) measuring potential reading level, (2) measuring silent and oral reading performance, (3) estimating reading levels, (4) identifying inhibiting factors, (5) determining chief skill deficiency area, (6) determining word identification technique, and (7) locating word recognition difficulties. Among the conclusions, it was stated that most instruments cannot be used to determine the chief area of skill deficiency, including specific problems of vocabulary, comprehension, and rate. Word recognition subtests are limited in scope of subskills assessed and emphasize spelling ability. In addition, skills for monosyllabic words are more often measured than skills required to unlock polysyllabic words. Group-administered tests are limited to silent activities.

1201. Wyatt, Nita. Pinpointing Specific Skill Needs. Paper presented at the Annual Meeting of the International Reading Association, Seattle, Wash., May 4-6, 1967, 11p. [ED 014 388]

Before any diagnostic reading instruction is done, teachers should determine the instructional level of the child and should pinpoint his specific skill needs by carefully observing his oral reading behavior. The following skills are suggested as good indicators of the child's attempt to apply phonics knowledge--(1) the use of context to predict what an unknown word may be before the analysis process begins or as the process begins, (2) the visual dissection of the word into pronounceable units, (3) the comparison of sounds produced through phonetic analysis with familiar pronunciations, and (4) the variation of the sound value given to a word until a recognizable word is produced. Findings from four studies are cited to support the contentions that connected reading requires an integration of several reading skills which may not be required in reading word lists and that the teaching of phonics improves word reading but not necessarily the reading of connected material. The teaching of phonics, therefore, should stress the application of phonics knowledge in unlocking unknown words met in reading connected material.

Achievement Tests

1202. Askov, Warren; and others. Assessment of the DeHirsch Predictive Index Tests of Reading Failure. Paper presented at the Annual Meeting of the International Reading Association, Atlantic City, N.J., April 19-23, 1971, 14p. [ED 051 983]

This study examined the predictive validity and the general usability of a battery of ten tests reported by DeHirsch, Jansky, and Langford, the DeHirsch Predictive Index Tests of Reading Failure. The DeHirsch battery was administered to 433 kindergarten children in six public schools. When the pupils entered first grade, the Metropolitan Readiness Test was administered; in second grade, pupils took the Gates-MacGinitie Reading Test. Regression analysis was used to assess the degree of additional information the DeHirsch tests added to the prediction of scores on the Gates-MacGinitie, beyond that provided by the Metropolitan. The alphabet subtest of the Metropolitan, and the word reversals and word reproduction tests of the DeHirsch, contributed the most to the prediction of second-grade comprehension scores. Discriminate analysis showed that the Metropolitan Test used alone properly classified 28 of 29 poor readers and 68 of 79 superior readers, and that the alphabet subtest discriminated nearly as well as all six Metropolitan subtests. It was concluded that it is questionable whether the time and expense involved in administering the DeHirsch tests is justified for general testing, but that they may be useful for assessment of marginal kindergarten students. Tables and references are included.

1203. Blanton, William, ed.; and others. Reading Tests for the Secondary Grades: A Review and Evaluation. Reading Aid Series. Newark, Del.: International Reading Association, 1972, 60p. [ED 071 059. Also available from the International Reading Association ($2.00 nonmember, $1.75 member)]

This booklet presents ideas for utilizing standardized reading tests and an informal inventory to determine the reading levels of secondary school students. Comprehensive reviews of the most commonly used standardized tests for high school students and information about their construction, standardization, administration, and use, make up the bulk of the text. The rest of the book deals with the criteria used in reviewing the tests, and there is a short chapter detailing how to select a reading achievement test.

The book is intended primarily for classroom teachers and other personnel directly concerned with selecting reading achievement tests; information is thus not presented in highly technical or statistical terms.

1204. Botel, Morton. A Comparative Study of the Validity of the Botel Reading Inventory and Selected Standardized Tests. Paper presented at the Annual Meeting of the International Reading Association, Boston, April 24-27, 1968, 19p. [ED 019 205]

The extent of the relationship of the Botel Reading Inventory, Forms A and B, and selected standardized tests to the instructional reading level of pupils in grades 1 to 6 were investigated, to provide evidence concerning the validity of the tests. The cooperative checkout was employed as a criterion. Teacher observation and pupil oral reading fluency were also used as validity checks. Correct grade placement was based upon ease of reading at, below, or above grade level. All reading test scores were correlated with the instructional level of the pupils, and the Botel Inventory was correlated with the standardized tests to provide information on the congruent validity of the inventory. Results indicated that, except for third grade, the Botel Reading Inventory might be superior to the standardized silent reading tests used in this study in placing pupils at their correct instructional levels. It was found that while the standardized tests overplaced more pupils than did the Botel Reading Inventory, many pupils were either correctly placed or underplaced by the standardized silent reading tests rather than overplaced. It was noted that some able pupils were limited to grade level on basal reading material or, at most, to one grade level beyond grade placement, despite the fact that their performance in oral reading and comprehension was almost perfect. References and tables are provided.

1205. Callenbach, Carl Anton. The Effects of Instruction and Practice in Nonsubstantive Test-Taking Techniques upon the Standardized Reading Test Scores of Selected Second Grade Students. Ed.D. Dissertation, The Pennsylvania State University, 1971, 98p. [ED 067 617. Document not available from EDRS. Available from University Microfilms (Order No. 72-13, 826)]

The following hypothesis was tested in this study: that second-grade students who receive instruction and practice in nonsubstantive test-taking techniques will achieve higher standardized reading test scores than second-grade students who do not receive this instruction and practice both immediately following treatment and four months after treatment. The students were ranked according to total raw scores recorded on the pretest, the Stanford Reading Test, Primary I, Form X, and alternately assigned from the ranking of raw scores and each classroom to the experimental and control conditions. The report describes the details of the testing procedures for both the experimental and control groups, and provides data supporting the contention that test wiseness is a potential source of variance in standardized test scores. The test-naive second graders receiving instruction and practice in non-substantive test-taking techniques achieved significantly higher scores on the standardized reading tests.

1206. Esposito, Marietta Lee. Role of Immediate Recall in Selected Comprehension Tests at the Junior High Level. Ed.D. Dissertation, Rutgers, The State University of New Jersey, 1971, 64p. [ED 054 914]

An investigation was made to determine (1) if different reading comprehension subtests measure the same facets of comprehension; (2) what proportion of variance is accounted for in scores if verbal comprehension is partialed out; and (3) how highly group intelligence test scores correlate with comprehension tests which require immediate recall and those that do not. Forty seventh-grade remedial reading students were given the Spache Reading Scales and the Triggs Diagnostic Reading Test. Lorge-Thorndike group intelligence test scores were intercorrelated with the comprehension scores. Of the ten intercorrelations among the four comprehension subtest and IQ scores, four were significant at the .05 level or greater. The range of the partial correlations was from -.21 to .13. The variance accounted for variation from .01 to .20. Triggs and IQ scores correlated highly at .50, but since a .39 correlation between IQ and Spache silent scores which demand immediate recall was also found, it was concluded that the third question was not satisfactorily answered. Suggestions for changes in the research design, a bibliography, appendixes, tables, and copies of the test are included.

1207. Farr, Roger. The Fallacies of Testing. Paper presented to the Conference on Reading and the National Interest, Bloomington, Ind., March 22-24, 1970, 10p. [ED 040 020]

Three major points covered by this report are the following: (1) what are the demands for reading assessment and how have the demands increased? (2) how adequately do present standardized reading tests meet these demands? and (3) what possible approaches exist for developing assessment procedures which meet these demands? The author asserts that an extreme interest in finding out how well students are reading exists within the educational profession and general public. Standardized tests are being used extensively to determine the students' reading levels, but almost all of those tests examined showed they are neither able nor designed to meet the demands of the decision situations in which they are often being used. In addition, many situations exist in which the results of these standardized reading tests are being misused and misinterpreted. The author concludes with four basic approaches which he believes may be considered to develop assessment procedures that meet the demands for accurate measurement of reading achievement.

1208. Farr, Roger, comp. Measurement of Reading Achievement. An Annotated Bibliography. Bloomington: Indiana University, ERIC Clearinghouse on Reading, 1971, 96p. [ED 049 906. HC not available from EDRS. Available from International Reading Association ($1.50 nonmember, $1.00 member)]

One of a series of reading research profiles developed from the ERIC/CRIER data base, this annotated bibliography which focuses on the assessment of reading behavior is aimed primarily at researchers, but is also relevant for test developers and users. The included studies cover the years 1950 to 1969, and were selected from published journal literature, dissertations, USOE-sponsored research, and International Reading Association conference proceedings. Part One examines organismic, test composition, and environmental factors which affect validity and reliability of tests and includes empirical studies of such factors. Part Two cites studies which examine validity and reliability problems related to vocabulary, comprehension, word attack, rate, study skills, oral reading, and other subareas of reading. Informal reading achievement measures, including informal reading inventories, check lists, rating scales, and teacher evaluations are discussed in Part Three. Multiple criteria use and other problems of measuring reading growth are considered in Part Four, school-wide testing programs are cited in Part Five, and unique approaches to measuring reading achievement are described in Part Six. An author index and ordering instructions for document reproductions are included.

1209. Farr, Roger; Anastasiow, Nicholas. Tests of Reading Readiness and Achievement: A Review and Evaluation. Reading Aids Series. Newark, Del.: International Reading Association, 1969, 54p. [ED 073 433. Also available from International Reading Association (Order No. 208, $2.00 nonmember, $1.75 member)]

This book is intended primarily for classroom teachers and other personnel who work directly with teachers in selecting reading readiness tests or achievement tests. The first chapter lists and briefly explains the criteria used by the authors in reviewing the tests included. These criteria are concerned with norms, standardization, objectivity, ease of administration and scorability, validity, reliability, and the test manual. The reading readiness tests reviewed are the Gates-MacGinitie Readiness Skills Test, the Harrison-Stroud Reading Readiness Profile, the Lee-Clark Reading Readiness Test, the Metropolitan Readiness Test, and the Murphy-Durrell Reading Readiness Analysis. The following reading achievement tests are reviewed: the California Reading Tests, the Gates-MacGinitie Reading Tests, the Iowa Silent Reading Test, the Metropolitan Achievement Tests--Reading, and the Stanford Achievement Tests--Reading. The appendix contains two charts, one a general description of the tests reviewed and the other a summary of the technical evaluation of the tests.

1210. Farr, Roger; Summers, Edward G. Guide to Tests and Measuring Instruments for Reading. Bloomington: Indiana University, ERIC

Clearinghouse on Reading, 1968, 97p. [ED 022 973]

This two-part guide was designed to serve as a comprehensive source of information on published reading tests. Part One provides the following descriptive information about each test: (1) the name as listed on the front cover of the test booklet, (2) the publisher's suggested grade or age level for test use, (3) the type of test--individual or group, (4) norming data--population, descriptive information, and extensiveness, (5) subtest names as indicated in the test booklet, (6) the number of available forms, (7) the original publication date, (8) the revision date, (9) the authors, (10) the publisher, and (11) the time needed for giving directions and administering the tests. Part Two provides an index to research articles which have reported use of the tests described in Part I. These research references are taken from reading research reported in six ERIC/CRIER basic references and are indicated by ERIC/CRIER document numbers. The names and addresses of the 45 participating publishers are included. This study was sponsored by the Bureau of Research of the U.S. Office of Education.

1211. Feldman, Shirley C.; and others. Analyzing Reading Growth of Disadvantaged Children through Longitudinal Study of Several Reading Measures. Paper presented at the Meeting of the American Educational Research Association, New York, N.Y., February 4-7, 1971, 13p. [ED 047 900]

The reading progress of 96 disadvantaged children from kindergarten through grade 3 was analyzed to determine rate and consistency of reading growth as estimated from several reading measures. Although steady growth was observed on all measures, rate and consistency varied with the type of reading measure used, as well as with the specific test series. The Metropolitan Achievement Tests and the New York Tests of Growth in Reading Yielded consistently higher scores than did the two informal measures, the Harris Graded Word Lists, a measure of sight vocabulary, and the highest level of book used in the classroom. The New York tests appeared to yield somewhat higher scores than did the Metropolitan tests. Acceleration appeared greater in the first and second grades on the standardized measures and in the third grade on the informal measures. There was approximately a one grade discrepancy between the frustration level estimated by standardized tests and the instructional level estimated by informal measures. It was concluded that standardized test results seem best suited for assessing the achievement growth of individuals and groups, while informal measures are probably best suited for determining each child's functioning level and for selecting materials. Tables are included.

1212. Follman, John; and others. Canonical and Partial Correlation of Critical Reading/Critical Thinking Test Scores--Twelfth Grade. Paper presented at the National Reading Conference, St. Petersburg, Fla., December 2-5, 1970, 6p. [ED 046 667. HC not available from EDRS. Available in Twentieth Yearbook of the National Reading Conference, Inc., from Marquette University]

The definition of critical reading, and the relationship between critical reading and critical thinking, reading, and scholastic aptitude and achievement tests, were investigated. The Reading Comprehension Test; Test of Critical Thinking, Form G; Nelson-Denny Reading Test, Form A; Lorge-Thorndike Intelligence Tests, Form A; and Florida Statewide Twelfth Grade Tests were administered to twelfth-grade students in Robinson High School, Hillsborough County, Florida. Critical Reading and critical thinking correlated low when verbal intelligence was partialled out, and moderately when IQ total, reading vocabulary, reading total, reading index, respectively were partialled out. When both intelligence and reading were removed in second-order partials, the correlations were all in excess of .67 between four sets of subtests: critical reading, critical thinking, reading, and reading and verbal and achievement. It was concluded that critical reading/critical thinking may exist as a thinking activity, but that critical reading/critical thinking overlaps strongly with verbal ability to such an extent that verbal ability may account for critical reading/critical thinking. References are given.

1213. Grossman, Gwendolyn Bryant. A Comparison of Upper Primary Language Arts Goals and Testing in Selected School Districts. Dissertation, 1967. [ED 016 654. Document not available from EDRS. Available from University Microfilms]

This study was initiated to analyze and compare the content of goals of fifth- and sixth-grade language arts programs with the language arts areas assessed by standardized achievement tests. By using a framework of communication skills recommended by several authorities in the language arts, seven elementary school teachers classified and judged the relevance of the content of goals stated in language arts curriculum bulletins, and of items in standardized tests. Results indicated that about half of the goals dealt with areas of mechanics--handwriting, spelling, and usage--and that there were proportionately more goals enunciated for handwriting skills alone than for all the skills of expressing thoughts and ideas. Goals emphasized expository rather than creative content, and the acquisition of knowledge and application of mechanical skills rather than the acquisition of the abilities of comprehension, analysis, synthesis, and evaluation. Test items adequately measured less than one percent of the goals. Measurement of the attainment of the majority of the goals--particularly in the areas of cognitive and affective processes in listening, speaking, and writing--required other assessment techniques. It is recommended, then, that standardized tests be supplemented by teacher-made tests, subjective procedures, cumulative case records, and general evaluation techniques.

1214. Hanson, Joseph T. The Use of Standardized Tests in Evaluating a Method of Teaching Reading. Paper presented at the Annual Meeting of the National Council on Measurement in Education, New York, February 1967, 11p. [ED 011 497]

Sex differences in reading achievement and the effectiveness of the phonovisual method of reading instruction in grades 1 to 3 when used as a supplement to the state-adopted co-basal reading series were studied in two elementary schools in Pasadena, California. Subjects in the experimental school (60 in grade 1, 68 in grade 2, 54 in grade 3) were matched with control school subjects on the basis of chronological age, sex, and scholastic aptitude as measured by the Metropolitan Readiness Tests, California Short-Form Test of Mental Maturity, and the Lorge-Thorndike Intelligence Tests. Experimental subjects were given daily instruction by the phonovisual method 100 minutes per week, while control subjects were given an equivalent amount of instruction with other supplementary materials. Achievement was tested by the California Reading Test and California Achievement Tests, reading and spelling. Mean test scores of the experimental group were found to be significantly higher at the .01 level of all tests in all grades except spelling in grade 3, which was significant at the .05 level. Girls' achievement was found to be higher than boys' except in grade 3 of the experimental group. The author concluded that the additional phonic instruction with the phonovisual method increased reading and spelling achievement.

1215. Hayman, John L., Jr.; Calendine, Jerry. Survey of Testing in the Great City Schools. Washington, D.C.: Council of the Great City Schools, 1970, 101p. [ED 055 122]

Returns from the survey of testing questionnaire, which was mailed to each testing director in the great cities program, are summarized. The survey includes (1) information concerning test standardization, (2) information concerning the use of test results, and (3) all tests currently used in the great city schools.

1216. Hopkins, Kenneth D.; Bracht, Glenn H. A Longitudinal Study of Constancy of Reading Performance. 12p. [ED 069 782]

The stability of reading performance, as measured by the Metropolitan Achievements Tests, Iowa Tests of Basic Skills, and Iowa Tests of Educational Development, was studied using students in grades 1 through 7 and grades 9 and 11. A reading vocabulary test and a reading comprehension test are included in all three test batteries. The standard scores on the three tests were pooled to obtain a composite reading score for three independent samples of students. Sample I consisted of grades 3-6 and 9 and 11, the number of students varying from a low of 71 (grade 5) to a high of 1,116 (grade 9); Sample II was made up of students from grades 1-7 and grade 9, the number varying from 520 (grade 2) to 1,240 (grade 7); and Sample III contained students from grades 1-6, varying in number from 1,095 (grade 6) to 1,320 (grade 1). Results of the study showed that substantial long-term stability was reflected in both the vocabulary and comprehension tests; grade 1 scores correlated above .5 with all subsequent measures. By the end of the primary grades, students' scores correlated above .70 with all subsequent measures. When the coefficients were correlated for attenuation to allow an estimate of the relationships after errors of measurement on the test were removed, the values were about .10 higher. It is concluded that although reading does not represent temporary maturational status for most pupils, it does have substantial relationship with terminal achievement levels in both reading vocabulary and comprehension.

1217. 1970-71 Individual Pupil Report: Explanatory Materials. Lansing: Michigan State Department of Education, 1971, 33p. [ED 053 217]

The two major purposes of this study are (1) to provide local school officials with information regarding the performance on basic skills achievement of each student who took the 1970-71 Michigan Educational Assessment Battery, and (2) to provide local officials with information that will assist them in understanding and interpreting their students' scores. The first of the four major sections describes the content of each subtest (vocabulary, reading, mechanics of written English, and mathematics) in the Educational Assessment Battery. The second describes cautions that must be exercised in the interpretation of individual pupil scores from the program. The third section explains how to interpret the materials that accompany this booklet, and the fourth section defines statistical terms used in the Educational Assessment program and provides technical information regarding the Educational Assessment Battery.

1218. Jones, Margaret Hubbard. The Unintentional Memory Load in Tests for Young Children. Los Angeles: University of California, Center for the Study of Evaluation, 1970, 27p. [ED 041 043]

The validity of certain standardized tests may be affected by the short-term memory load therein and its relation to a child's short-term memory capacity. Factors of testing which increase a test's memory load and consequently interfere with comprehension are discussed. It is hypothesized that a test which strains the short-term memory capacity of a child is functioning as an unintended screen to eliminate subjects with inferior memory capacities and does not adequately measure the intended ability. A number of tests randomly selected are examined in terms of three ways in which memory capacities can be overloaded in a test. In conclusion, since there does not appear to be a high correlation between memory skills and the other skills involved in the learning processes, it is recommended that memory skills be measured as such, and that the other skills be assessed independently of the memory screen. A listing of tests is included.

1219. Lichtenstein, Pauline; Yuker, Harold E. Validation of the Use of the Cooperative Reading Comprehension Test by University College at Hofstra University, 1967-1970. Hempstead, N.Y.: Hofstra University, Center for the Study of Higher Education, 1972, 16p. [ED 061 019]

This study was designed to examine the validity of the Cooperative Reading Comprehension Test (CRCT), Form 1A, for advisement purposes. During the period under study, February, 1967 through September, 1969, 1,020 people took the test, and 39 percent of those tested enrolled at Hofstra University. CRCT scores on the average differentiated those who attended the university from those who did not, but did not differentiate those who were still attending from those who withdrew. No statistical differences were found among the three groups in age or sex, but the mean score for nonattenders was always significantly lower than comparable groups of attenders or withdrawers. For both attenders and withdrawers, total CRCT score correlated low or moderately with selected academic subjects as well as cumulated grade-point average. However, total CRCT scores were able to differentiate those at the low end of academic achievement. No statistically significant advantage for low CRCT scorers from taking a reading course was indicated. Norms were calculated based on the 398 students who attended, and the 20th percentile cutoff for advising a reading course was 162. Tables and references are included.

1220. Livingston, Samuel A. Verbal Overload in Achievement Tests. Baltimore, Md.: Johns Hopkins University, Center for the Study of Social Organization of Schools, 1972, 26p. [ED 069 700]

In this study sponsored by the U.S. Office of Education, a social studies achievement test made up of items rewritten in simplified language was compared with a test containing the same items in their original form, by administering the two tests to the entire eighth-grade class of a suburban junior high school near Baltimore. The results showed only slightly higher scores for students taking the simplified test. Differences among the items in estimated reading difficulty were not associated with differences in actual response difficulty. The findings were interpreted to mean that most students who know enough to answer a test item can also read well enough to understand it.

1221. McNeil, John D. Performance Tests: Assessing Teachers of Reading. Paper presented at the Annual Meeting of the California Educational Research Association, San Diego, Calif., April 1971, 10p. [ED 054 200]

The rational and description of tests of teaching power by which teachers have an equal chance to show their relative ability to affect pupils, achievement in reading skills are discussed. Illustrations of these performance tests and a means for administering them--"Teaching Faires"--are also presented. Data in support of teaching performance tests in reading are reported along with information about teachers resistance to such tests. Suggestions are made for further work with tests of teaching power.

1222. Nettleton, Aileen L. Taming the Standardized Testing Program. Symposium paper presented at the Annual Meeting of the American Educational Research Association, Chicago, Ill., April 1972, 13p. [ED 064 336]

The city-wide standardized testing program of Madison Public Schools was reviewed by a committee of a cross-section of school system educators as part of a total effort to design a testing program more sensitive to the needs of the system. As a result, standardized testing was reduced to reading (grades 1, 2, 3, 4, 5, and 8) and mathematics (grade 5). Levels of administration were determined by the importance of measuring reading progress in elementary grades and the value of achievement level indicators in transition between elementary, middle, and high school. Under this plan, standardized tests are intended to provide normative data to compare the school system with others, to evaluate educational programs within the system, and to give an indication of student achievement ranking.

1223. Olson, Arthur V.; Rosen, Carl L. Exploration of the Structure of Selected Reading Readiness Tests. Paper presented at the Meeting of the American Educational Research Association, New York, February 5-7, 1971, 9p. [ED 050 895]

The technique of factor analysis was used to explore the structure of five batteries of readiness tests (Gates Reading Readiness Test, Developmental Tests of Visual Perception, Metropolitan Readiness Tests, specially constructed readiness test by Olson, and Wechsler Intelligence for Children) as predictor variables for the Stanford Achievement Test, Primary I battery. These tests were administered to 218 first-grade children. Four factors (verbal-conceptual ability, auditory-visual association, specific readiness, and specific perceptual organization) were retained for rotation, employing the Maxplane method. Intercorrelations among the oblique factors indicated a degree of interdependence between factors 1, 2, and 3. Among the findings were (1) that specific subtests from the Developmental Tests of Visual Perception and the Metropolitan tests were found to make limited contributions to the prediction of reading achievement, and (2) that the specific readiness factor and the specific perceptual organization factor were both independent of reading achievement. The need for further exploration similar to this study was suggested. Tables and references are included.

1224. Pascual, Henry W., ed. Reading Strategies for New Mexico in the 70's. Resource Guide Number 2. 1972. [ED 061 022]

The three papers in this resource guide are oriented to the needs of Spanish-surnamed and Indian children. The first paper points out three concerns to be examined before selecting reading materials: (1) the population for whom selection is planned, (2) criteria emphasizing children's needs, and (3) apparent trends in reading instructional materials appropriate for the population. Critical points for selection and evaluation of reading instructional materials for Indian and Spanish-speaking children are discussed. The second paper stresses teacher-student interaction, diagnostic teaching, and classroom management in the elementary school. The author feels that standardized tests, especially their norms should not be used with minority groups, but that the informal reading inventory is best for these children. He also refers to four approaches used to teach non-English-speaking children, and to four language measures. The third paper observes that schools are serving the interests of the dominant social forces, and that while unable to reform schools, teachers can humanize their classrooms by examining and revising certain beliefs which lend to anti-humanistic school practices. Recognition of individual differences and use of evaluation as formative in a diagnostic sense are strongly recommended. References are included.

1225. Pederson, Walter F.; Switzer, Charles A. Placement Testing--From FLES to High School. A Report of the Modern Language Achievement and Placement Testing Program of West High School, Bakersfield, California. Bakersfield: West High School, 1967, 7p. [ED 019 037]

As the result of a California legislative mandate for a comprehensive language program beginning at the sixth-grade level, West High School set up a two-fold language achievement test to accurately place qualified students in advanced courses, and to get a general idea of the level of achievement of incoming students with various degrees of previous language experience. The two tests used to evaluate listening and reading skills were the Common Concepts Foreign Language Test published by the California Test Bureau, and the Baltimore County Spanish Test published by the Bobbs-Merrill Company. Both tests were chosen because they most accurately measured the objectives of the language program in West High School. Final decision for promotion is based on test results, student-teacher (testing instructor) conference, student request, parental approval, and testing instructor recommendation. A scale is included to show the results of the achievement tests used.

1226. Schaie, K. Warner; Roberts, Jean. School Achievement of Children 6-11 Years as Measured by the Reading and Arithmetic Subtests of the Wide Range Achievement Test. Bethesda, Md.: Health Services and Mental Health Administration (DHEW), 1970, 54p. [ED 052 230. HC not available from EDRS. Available from Superintendent of Documents, U.S. Government Printing Office ($1.50)]

This report contains national estimates of school achievement for children aged 6-11, as measured by the reading and arithmetic subtests of the Wide Range Achievement Test (WRAT). This data was obtained in the second cycle of the Health Examination Survey, conducted in 1963-65. A probability sample of 7,417 children was selected to represent the 24 million noninstitutionalized children in this age group. The sample, 96 percent of which was examined, was representative of the child population of the U.S. with respect to age, sex, race, region, size of place of residence, and change in size of place of residence from 1950 to 1960. The findings on school achievement are presented by age, grade, and sex. Grade equivalents, percentile ranks, and standard score equivalents of these raw scores, are included. Comparison is made with the data available for the group on which Jastak standardized the 1963 revised WRAT. National estimates from this survey, on the average, were lower than those for the standardization group for both subtests, significantly so for most ages on the arithmetic subtest. In general, slightly greater variability in scores was found in the reading but not the arithmetic subtest for the U.S. children from the present study than the variability in Jastak's standardization group.

1227. Sawyer, Rita. Diagnosis for the Classroom Teacher. Paper presented at the College Reading Association, Knoxville, Tenn., April 4-6, 1968, 10p. [ED 029 754]

The role of the classroom teacher as a diagnostician is described. Since the purpose of reading diagnosis is to ascertain the probable potential of each student and to determine what his instructional needs are and where to begin instruction, extensive individual testing is neither possible nor recommended for the classroom teacher. However, reading expectancy, self-concept, and motivation can be determined from teacher observation and school record analysis. Also, the best instrument available to the classroom teacher for obtaining information about groups of children is the standardized test. The uses, advantages, and disadvantages of a group standardized test for screening and grouping pupils, are discussed. Some guidelines for analyzing and comparing subtest scores to obtain diagnostic information and for interpreting test behavior are given.

1228. Short, N.J. PIC Reading and Spelling Diagnostic Test Form. Minneapolis: Minneapolis Public Schools, 1971, 28p. [ED 060 029. Document not available from EDRS]

This diagnostic skills checklist enables the methods and materials specialists to note the reading and spelling skills the child has mastered, those skills which are weak or not developed, and those skills which are clearly beyond the child's capability of mastering because of insufficiently developed abilities at lower, prerequisite levels. Also identified are tests which have been administered to the child during the evaluation period. See also TM 001 111 for a description of the Regional PIC program.

1229. Short, N.J. PIC Reading Readiness Test Form. Minneapolis: Minneapolis Public Schools, 1971, 6p. [ED 060 030. Document not available from EDRS]

This rating form concerns the measurement of basic skills in connection with assessing reading readiness. Motor skills, ability to adjust to learning situations, familiarity with the alphabet, and general knowledge are assessed. See TM 001 111 for details of the Regional PIC program in which it is used.

1230. Slobodzian, Evelyn B. Use of the Illinois Test of Psycholinguistic Abilities as a Readiness Measure. Paper presented at the Annual Meeting of the International Reading Association, Boston, April 24-27, 1968, 10p. [ED 020 081]

The Illinois Test of Psycholinguistic Abilities, a test designed for children aged 3-9, is of value to the kindergarten or first-grade teacher in diagnosing for the purpose of remediation, especially in communities where disadvantaged areas exist. From its use, the teacher can determine background inadequacies, differences between the level of a child's ideas and his ability to express them, deviations in auditory and visual abilities, degrees of self-confidence in language usage, differences in hearing and speaking vocabularies, and articulation problems. Test results allow the teacher to create programs that develop reading readiness on the basis of individual needs.

1231. Strang, Ruth. Reading Diagnosis and Remediation. Bloomington: Indiana University, ERIC Clearinghouse on Reading; Newark, Del.: International Reading Association, 1968, 204p. [ED 025 402. HC not available from EDRS. Available from the International Reading Association ($3.50 nonmember, $3.00 member)]

This monograph includes an extensive review and evaluation of the research literature and offers teachers and clinicians background for understanding reading diagnosis, the correlates and causes of reading disabilities, diagnostic techniques, and remediation. The following topics are discussed: (1) the nature and levels of diagnosis, (2) the characteristics and conditions related to reading achievement and disability, (3) severe reading disabilities, (4) diagnostic techniques, (5) diagnosing special groups, (6) remediation, and (7) trends, needs, and future directions in diagnosis and remediation. There is a growing emphasis on early diagnosis, differential diagnosis, behavioral approach, perception, and learning modalities. However, teachers and clinicians must be helped to improve their competence in using diagnostic instruments and results, in observing student behavior, and in selecting the most appropriate teaching and guidance procedures. Self-diagnosis through introspective-retrospective verbalization should be encouraged. More extensive case studies and more research on the effectiveness of certain teaching procedures with certain individuals under certain conditions should be conducted. This monograph is accompanied by an extensive bibliography and a list of reading tests.

1232. Wark, David M. An Automated Individualized Diagnostic for College Centers. Paper presented at the College Reading Association, Knoxville, Tenn., April 4-6, 1968, 13p. [ED 026 203]

A self-diagnostic system called the Automated Individualized Diagnosis System (AID) tested at the Reading and Study Skills Center, University of Minnesota, was designed to replace the human counselor. It consists of an answer sheet, a self-analysis profile blank, and an audio tape which helps the student derive his reading profile and select the practice materials he needs. Three trials conducted showed that the system had no adverse effect on the length of contact the students had with the reading program. The students were generally satisfied with the system's efficiency in giving specific information on profiling reading ability, and using this profile as the basis of diagnosis and remediation. However, they felt that the presence of a human counselor would add warmth, friendliness, and a feeling of security. Like other automated instructional systems, the aid fails in the affective domain.

1233. Weber, Billy-Belle Hart. The Effect of Two Language Arts Curricula Upon Standardized Achievement Test Scores in the Inner-City. Ph.D. Dissertation, St. Louis, 1969, 122p. [ED 045 651. Document not available from EDRS. Available from University Microfilms (Order No. 70-1876, MFilm $3.00, Xerography $6.00)]

The focus of this study was to determine which type of curriculum--child-adaptive or book-oriented--would be most successful in raising the scores of low-income, inner-city black children on the language arts sections of standardized achievement tests. Eight teachers, four using a book-oriented curriculum and four the other, were selected from a list of fifth- and sixth-grade "superior" teachers in the inner-city district of East St. Louis, Illinois. From these teachers' rooms, ten children per room were randomly chosen. Their total May, 1967, language and reading scores on the California Achievement Tests, Form X, were used as pretests; their scores of the May, 1968, testing of the same test form were used for posttests. Two assessments, one for reading and one for language, were made by the use of analysis of variance, randomized groups, K=2. The growth each child made in the experimental year, not the scores on the test, were used in the statistical analysis. The results showed that there was no significant difference in the test results of either group; the hypothesis that the child-adaptive curriculum would produce higher scores was rejected.

1234. Wilson, Richard C. Using Individualized Reading as a Diagnostic Technique. Paper presented at the Annual Meeting of the International Reading Association, Boston, Mass., April 24-27, 1968, 7p. [ED 020 079]

The identification and rectification of personal reading needs through individualized reading procedures are discussed. The shift of corrective reading from group to individual needs is urged. Remediation should begin with topics agreeable and enjoyable to the learner. Through pupil conferences and an informal reading inventory using this type of material, remediation and skill growth can be directed and motivated toward personal satisfaction. Continual diagnosis of needs is dependent on detailed anecdotal records concerning pupil interests, free reading, and a skill building profile. Sharing the findings with each child, his parents, and other professional staff members is recommended as a possible aid to healthy improvement of skills and sympathetic understanding of disabilities. References are listed.

1235. Winkley, Carol K. What Do Diagnostic Reading Tests Really Diagnose? Paper presented at the Annual Meeting of the International Reading Association, Anaheim, Calif., May 6-9, 1970, 27p. [ED 043 452]

A study was made of nine reading tests, including both group and individually-administered measures, which are claimed to be chiefly diagnostic. Instruments analyzed were the following: Silent Reading Diagnostic Tests (Bond, Balow, and Hoyt), Botel Reading Inventory, Durrell Analysis of Reading Difficulty, Gates-McKillop Reading Diagnostic Tests, McCullough Word Analysis Tests, Roswell-Chall Diagnostic Reading Tests, Diagnostic Reading Scales (Spache), and levels I and II of the Stanford Diagnostic Reading Test. Examination of the nine diagnostic batteries revealed subtests for (1) measuring potential reading level, (2) measuring silent and oral reading performance, (3) estimating reading levels, (4) identifying inhibiting factors, (5) determining chief skill deficiency area, (6) determining word identification techniques and (7) locating word recognition difficulties. Among the conclusions, it was stated that most instruments cannot be used to determine the chief area of skill deficiency, including specific problems of vocabulary, comprehension, and rate. Word recognition subtests are limited in scope of subskills assessed and emphasize spelling ability. In addition, skills for monosyllabic words are more often measured than skills required to unlock polysyllabic words. Group-administered tests are limited to silent activities.

Informal Reading Inventory

1236. Beldin, H.O. Teaching Diagnostic Techniques to Classroom Teachers. Paper presented at the Annual Meeting of the International Reading Association, Boston, April 24-27, 1968, 11p. [ED 022 629]

Many classroom teachers are not teaching children to read at proper levels because they lack skill administering diagnostic tests and need practice interpreting children's reading behavior during testing. The text-lecture approach may be adequate for imparting information about diagnostic procedures, but it is not adequate for developing skill in the application of this information. Audio and videotapes, transparencies, and films can be used to simulate actual classroom behavior. Audio tapes develop skills of auditory perception and memory, while videotapes and films develop skills in the observation and interpretation of behavior. Simulation materials which require teacher response can substitute for children in the early part of a training program. Later the teachers assume responsibility for the analysis of reading behavior while working with children under the supervision of the college instructor. Such training facilitates the use of the new skills in the classroom.

1237. Della-Piana, Gabriel; and others. New Directions for Informal Reading Assessment. Paper presented at the Annual Meeting of the International Reading Association, Kansas City, Mo., April 30-May 3, 1969, 11p. [ED 030 540]

Construction, administration, and interpretation of an informal reading inventory is, perhaps, too time consuming a task for the classroom teacher, who may decide that other activities are more relevant. The informal reading inventory will probably be built into basal materials or into diagnostic batteries. However, the teacher can develop other diagnostic tools that will add to his effectiveness in a reading program which already has formal diagnosis and individually-prescribed instruction. The teacher can observe reading behavior, diagnose problems, prescribe measures for solution, and teach, making revisions as needed. An example of diagnosis and prescription of one specific problem is included.

1238. Dorinson, Zena; Fiedler, Margaret. The Effect of Informal Reading Inventories on a High School Reading Program. Paper presented at the Annual Meeting of the International Reading Association, Boston, April 24-27, 1968, 13p. [ED 022 622]

During an inservice training program on the construction and use of informal reading inventories, fourteen teachers of Freshman English learned how to administer informal reading inventories, how to use information obtained to construct reading profiles, and how to use reading profiles to guide reading instruction. After six two-hour sessions, they brought their classes to the developmental reading laboratory four times during the school year for a week's instruction in vocabulary, comprehension, and study skills. The effectiveness of the program was evaluated by the teachers and students alike. Results showed that students and teachers gained from the use of informal reading inventories. An inservice training program focused on the construction and use of these inventories effected changes in teacher behavior in terms of knowledge of the nature of reading processes, the meaning of reading difficulties, and the use of new reading instructional techniques. Results also showed that future inservice training programs should emphasize organizational procedures of grouping and individualized instruction.

1239. Farr, Roger. Grade Levels and Test Scores: What Do They Mean? Number 2. Washington, D.C.: National Reading Center Foundation, 1971, 6p. [ED 059 010. Also available from National Reading Center (free)]

The idea that some definite designation of a child's reading ability can be gained from a grade level or percentile score on a standardized test is rejected in favor of the idea that such a score is only an estimate of ability. Informal tests in which children read from passages varying in difficulty can give much helpful information to teachers. Variations in test scores, whether formal or informal, may be due to many factors in the child, in the test, or in the procedure used to norm the test. The important thing for parents to know is that reading level scores are merely estimates, and are valuable for helping guide instruction, not for labeling children. This brochure is one of a series commissioned by the National Reading Center to help inform all citizens about reading issues, and to promote national functional literacy.

1240. Kelly, Dean. Using an Informal Reading Inventory to Place Children in Instructional Materials: The Berea, Ohio In-Service Education Experiment. Paper presented at the Annual Meeting of the International Reading Association, Kansas City, Mo., April 30-May 3, 1969, 11p. [ED 032 198]

A comparison was made of the effectiveness of a simulation-type inservice education program on teacher awareness of pupils' instructional reading levels, in relation to the time of school year that the inservice program was conducted. Specific simulation processes, including sound films, audio tapes, overhead transparencies, and instructional booklets, provided teachers with a knowledge of reading inventory. A three-group-posttest-only control group research design utilized three stratified random samples of 32 teachers each from grades 2 through 5 in a large suburban school district. Pupils were randomly selected from each teacher's classroom. Differences between the grade level of pupils' readers and their performance on McCracken's Standard Reading Inventory constituted the measure of teacher awareness. Findings indicated that this inservice program was effective only when conducted before school begins. Those teachers who participated in the program later in the school year were no more aware of pupils' instructional levels than those who did not participate. References are included.

1241. Kender, Joseph P. An Analysis of Factors Associated with Informal Reading Tests at the Eighth Grade Level. Paper presented at the Annual Meeting of the International Reading Association, Boston, Mass., April 24-27, 1968, 17p. [ED 019 206]

Factors pertaining to informal reading tests were analyzed. Subjects were 100 eighth graders in a junior high school. The median nonverbal intelligence test score for the group was 116.37. Three informal reading tests were administered--the Informal Reading Inventory, the Experimental Reading Inventory, and the Botel Reading Inventory. The graded texts were read silently and orally, and comprehension was checked after each reading. Criteria were used for scoring as prescribed by Kilgallon and Cooper. Analysis of variance, correlation, and Z ratios were used to analyze the data. Results indicated that the differences among the mean instructional levels of the three tests were significant except between the Informal Inventory and the Experimental Inventory. Correlations among the instructional levels of the three tests were all positive and high. When the Experimental Inventory was scored by both the Kilgallon and Cooper criteria, the difference obtained was significant. There was a significant difference between silent and oral reading comprehension. Reading performance was adequate despite vocalizing for good readers and poor readers. Additional results, conclusions, and references are presented.

1242. Leibert, Robert E. Some Differences Between Silent and Oral Reading Responses on a Standardized Reading Test. Paper presented at the Annual Meeting of the International Reading Association, Seattle, Wash., May 4-6, 1967, 14p. [ED 016 565]

A study designed to identify some of the differences between the responses on the Gates Advanced Primary Reading Inventory (IRI) is reported. Subjects were 65 third-grade pupils in West Babylon, New York. Pupils at the same instructional level scored higher in the recognition test (Gates) than in the recall test (IRI). The responses of the pupils illustrated that the results of a test such as the Gates cannot be analyzed fully unless the manner in which the responses were derived can be determined. On the IRI, where the majority of testing is oral, guessing is held to a minimum. An analysis of partial reading indicated that pupils can read inaccurately and still obtain the correct answer to items on standardized test such as the Gates. Therefore, inaccurate reading alone does not account for correct or incorrect answers on that test. Significant differences between the tests indicate that the Gates grade-placement score reflects a more global measure of reading performance than does the instructional level of the IRI, and that the Gates should not be expected to give a score equivalent to the instructional reading level of the informal test. Tables and references are given.

1243. Lowell, Robert E. Problems in Identifying Reading Levels with Informal Reading Inventories. Paper presented at the Annual Meeting of the International Reading Association, Kansas City, Mo., April 30-May 3, 1969, 4p. [ED 032 199]

Several factors which often invalidate the obtaining of independent, instruction, and frustration reading levels with informal reading inventories are discussed. The classroom teacher's inability to note and evaluate errors in performance was noted in research studies by Kender, Millsop, Ladd, and others. The oral reading at sight, which is typically required in the informal inventory, is indicated as conflicting with suggested curricular practice for reading instruction. The errors on four rereadings for an eleven-year-old boy are tabulated, and show a dramatic improvement on rate and accuracy, as would be expected. Such factors as the individual's interest in the content and desire to read are discussed. Using standardized individual or group tests of reading performance is suggested for initial grouping, and for the assignment of materials to pupils.

1244. McGinnis, Dorothy J. Making the Most of Informal Inventories. Paper presented at the Annual Meeting of the International Reading Association, Boston, April 24-27, 1968, 15p. [ED 026 211]

Informal inventories emphasize observing a child's behavior and performance in order to draw inferences about factors affecting his achievement in all areas. Suggestions are given for some uses of informal inventories, teacher-designed measures, and adaptations of such tests as the Minnesota Rate of Manipulation Test and the Gray's Oral Reading Paragraphs. Some ways to improve reliability and validity are suggested. A few techniques for identifying and interpreting behavior are given. A case study illustrating the use of boy's comments during informal reading testing is reported. References are included.

1245. Murray, Beulah B. Appendix A: Test, Inventory, and Evaluation Forms. Appendix B: Treatment. Clarksville, Tenn.: Austin Peay State University, 1972, 49p. [ED 068 571. (Not available separately. Available with ED 068 497]

Appendix A includes instructions and/or evaluation forms for the following: reading assistance application, the Personal Adjustment Inventory, the Informal Word Recognition Test, the Informal Reading Inventory, the Oral Reading Summary, ocular motility testing and scoring, parent form, parent evaluation, parent's evaluation of assistance, and the teacher's preobservation report and postobservation evaluation. Appendix B presents a description of the demonstration lessons for children with reading difficulties, a list of parent-teaching handout sheets, and sample outlines and transcriptions of teaching sessions. This study was sponsored by the National Center for Educational Research and Development, USOE.

1246. O'Brien, Patti. An Informal Reading Inventory--A New Approach. Paper presented at the Annual Meeting of the International Reading Association, Anaheim, Calif., May 6-9, 1970, 13p. [ED 046 672]

The idea of using the Informal Reading Inventory (IRI) as a diagnostic instrument for placing children in their basal texts is a sound one. Traditional IRI's, however, based on random selection of passages from texts, tend to give inaccurate placements for children. This happens because the text pages do not always contain enough new words to sample the child's ability to handle that grade level's vocabulary. Therefore, a new method of divising and IRI is suggested in which new words are taken from the text and incorporated into an original paragraph. To discover the usefulness of this procedure, a traditional IRI, and one based on the new method, were administered to ten second-graders and ten fourth-graders. The Gray Oral Reading Test was also given. The results indicated that the new IRI (1) presented fewer total number of words per selection, with more new words in each, (2) required fewer selections to be read, and (3) gave an instructional-level score in ten cases lower than the traditional IRI. Both inventories gave lower instructional scores than did the Gray Oral Reading Test. The issue that still remains for further investigation is the accuracy of placement. Tables and references are included.

1247. Potter, Thomas C.; Rae, Gwenneth. Informal Reading Diagnosis; A Practical Guide for the Classroom Teacher. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973, 221p. [ED 071 042. Document not available from EDRS. Available from the publisher ($11.95 cloth, $6.95 paper)]

This book offers an overview of the reading diagnosis process, emphasizing specific informal testing techniques for use in the classroom. In addition to presenting specific testing instruments, the book discusses the theory and practice of diagnosis teaching, describes the instruments and the rationale for their use, and offers specific guidance on administration and scoring. Included are discussion on, and informal tests evaluating the following areas: perceptual discrimination skills, receptive and generative language skills, phonic and word analysis, oral reading assessment, silent reading assessment, study and reference skills, and attitudes and appreciations in reading skills development.

1248. Powell, William R. Reappraising the Criteria for Interpreting Informal Inventories. Paper presented at the Annual Meeting of the Reading Association, Boston, April 24-27, 1968, 18p. [ED 022 631]

The widely accepted 95 percent word recognition criterion used for designating the instructional reading level is reevaluated. A survey of the original study of Betts and Killgallon indicated (1) that the 95 percent word recognition criterion was based on a 41-case sample at the fourth-grade level, (2) that repetition errors occurred most frequently and were counted as scoreable errors, and (3) that the child read the paragraph silently first, then orally. A sample of 178 average-achieving pupils in grades 1 to 6 was drawn. The highest reading level with a comprehension score nearest the 70 percent cutoff level was determined for each subject. The lowest percent of word recognition accuracy within the 70 percent comprehension. Pupils in grades 3 through 6 could tolerate on the average 91 to 94 percent word recognition score. It is suggested that the currently used informal inventories be viewed more as methodology with guidelines rather than as a test instrument. A table and references are included.

1249. Powell, William R. The Validity of the Instructional Reading Level. Paper presented at the Annual Meeting of the International Reading Association, Anaheim, Calif., May 6-9, 1970, 20p. [ED 040 029]

Presented is a critical inquiry about the product of the Informal Reading Inventory (IRI), and about some of the elements used in the process of determining that product. Recent developments on this topic are briefly reviewed. Questions are raised concerning what is a suitable criterion level for word recognition. The original criterion of 95 percent correct pronunciation for word recognition is considered too high. The application of one set of performance standards uniformly across all grade levels is questioned. Neither quantitative nor qualitative uniformity across passage levels is considered appropriate in dealing with errors. It is noted that present knowledge of the IRI precludes definitive statements concerning the hierarchial relation of the independent, instructional, and frustrational reading levels. The real value of the IRI is seen as affording the possibility of evaluating reading behavior in depth, and as offering potential for training prospective teachers about reading behavior. References and tables are included.

Rating Scales

1250. Harvill, Leo M. Evaluation of Several Methods for Measuring Young Children's Educational Attitudes. Vermillion, S.D.: University of South Dakota, School of Education, 1971, 38p. [ED 056 059]

Five scales designed to measure the attitudes of young children toward arithmetic, reading, and art were developed. Two of the scales (picture and forced choice) were Ipsative in nature; the remaining three (millimeter, box, and semantic differential) allowed the child to express a more absolute attitude about each activity. The scales were administered to a sample of second- and third-graders, and their teachers were asked to name those students who liked and those who disliked arithmetic the most. Intercorrelations were determined using the multitrait-multimethod approach. It was concluded that (1) group attitude scales concerning school activities can be administered to young children with few problems or errors; (2) children most enjoyed the picture scale; (3) Ipsative attitude measures should be used with great caution; (4) teacher nominations are not very valid as a criterion measure for primary grade attitude scales; (5) the two most promising types of scales were the millimeter and semantic differential scales; and (6) a method which may show some promise is the addition of pictures to these two scales for added interest and clarity. See ED 056 087, ED 056 088, ED 056 089 for descriptions of the scales.

1251. Harvill, Leo M. Box Scale. Vermillion, S.D.: University of South Dakota, School of Education, 1971, 2p. [ED 056 089. Document not available from EDRS separately. See ED 056 059]

This second-grade scale contains ten items related to arithmetic, and one item related to each of the following topics: reading, art, and playing. The third-grade scale, which is not included, follows a similar format, although the items do differ somewhat in content. Each question is followed by five boxes of succeedingly smaller size. The child indicates the degree of his like or dislike by the size of the box he picks. Each item is scored on the basis of one point for a mark in the smallest box on up to five points for a mark in the largest box. See also ED 056 087 and ED 056 088.

1252. Harvill, Leo M. Forced Choice Scale. Vermillion, S.D.: University of South Dakota, School of Education, May 1971, 3p. [ED 056 087. Document not available from EDRS separately. See ED 056 059]

This Ipsative scale is composed of triads of statements concerning school tasks. The tasks are as follows: write a story, write the alphabet, read a story, paint a picture, add numbers, subtract numbers, and write the numbers from 1 to 20. The triples are composed with each of the three arithmetic tasks combined with all possible pairs of the four non-arithmetic tasks, for a total of eighteen triads. The child is asked to put an X by the activity that he likes best, and an O by the activity that he likes least. See also ED 056 088 and ED 056 089.

1253. Harvill, Leo M. Millimeter Scale. Vermillion, S.D.: University of South Dakota, School of Education, May 1971, 3p. [ED 056 088. Document not available from EDRS separately. See ED 056 059]

This absolute scale contains nine items each of which consists of a 100-millimeter vertical line, with small division marks every 25 millimeters with the words "high" at the top and "low" at the bottom of the line. Above each of the vertical lines is a word or phrase. For the second grade scale these words are arithmetic, counting, adding, writing numbers, reading, playing, subtracting, art, and word problems. The scale for the third grade does not include counting; instead, the term multiplying is added. The child is asked to respond to each term by placing a short horizontal line across the vertical line to indicate the degree of his attitude. See also ED 056 087 and ED 056 089.

1254. Heimberger, M.J. Sartain Reading Attitudes Inventory. Paper presented at the Meeting of the Pennsylvania Educational Research Association, Pittsburgh, Pa., April 29-May 1, 1970, 9p. [ED 045 291]

This inventory was devised in order to measure how children feel about reading. It is divided into four sections--recreational reading, work-type reading learning to read, and social values--with a total of 37 forced-choice type of responses. Besides its ease of administration and scoring by the classroom teacher, it requires only twenty to thirty minutes to administer. Percentile norms for age levels (6-6 through 11-5) and for economic levels (lower, middle, and upper income) were set up from samples drawn from communities nationally representative of general socioeconomic levels. The total sample consisted of 1,093. The table of percentile norms included in this study showed that the age groups 8-6 through 9-11 demonstrated the greatest interest in reading, and the age 10-6 through 11-5 group, the least. Because of the few children sampled at age 6-6 through 7-6, no conclusions could be made at this level. Contrary to expectations, the norms for the three socioeconomic levels did not vary significantly. The general opinion that children from the lower socioeconomic levels are less interested in reading than children who come from higher levels was not upheld. The reading attitudes inventory is included.

Reading Skills

1255. Botel, Morton. Ascertaining Instructional Levels. Paper presented at the Annual Meeting of the International Reading Association, Seattle, May 4-6, 1967, 7p. [ED 014 373]

A rationale for fitting books to the pupil based on both psychological and linguistic evidence is presented. The goal of placing students on their proper instructional level is not achieved generally in a school unless it is made a matter of policy and implemented in well-defined ways. Three school-wide procedures concerned with determining instructional levels are considered--the informal teacher appraisal, checkout procedures, and reading inventories and placement tests. Teacher appraisal in every subject and in every grade is the ideal approach to the continuous problem of determining instructional levels. In the checkout procedure, a reading specialist working with the teacher or principal shares the responsibility of advancing pupils from one level to another by listening to the child read orally, and then checking his comprehension in a variety of ways. Reading inventories should be regarded as starting points. Seven references are given.

1256. Davis, Frederick B. Identification and Measurement of Reading Skills of High-School Students. Philadelphia: Pennsylvania University, 1967, 84p. [ED 014 397]

A study described as the first application of cross-validated uniqueness analysis was designed to eliminate the effects of imperfections in a prior factor-analytic study of reading comprehension which used tests especially constructed to measure mental skills in reading. A uniqueness analysis based on large samples was used to obtain estimates of the percentage of nonchance variance. Students in grade 12 near Philadelphia served as subjects for the preliminary and main studies. Eight reading comprehension skills were tested. In the preliminary study, two parallel forms of the test were administered to approximately 400 students. A pool of 24 items for each of the eight skills was assigned to two parallel forms of the test. Approximately 1,000 students took both forms of the test with one or two days intervening. Intercorrelations and multiple regression analyses were used to analyze the data. It is concluded that comprehension among mature readers is not a unitary mental skill or operation. It is pointed out that systematic learning exercises appropriate in level of difficulty for developing proficiency in the constituent skills of comprehension among mature readers. A bibliography is given.

1257. Davis, Frederick B. Psychometric Research in Reading. Paper presented at the Annual Meeting of the International Reading Association, Detroit, Mich., May 10-13, 1972, 17p. [ED 063 096]

This review of psychometric research in reading analyzes the factors which seem related to reading comprehension skills. Experimental analysis of reading comprehension by L.E. Thorndike revealed two major components: knowledge of word meanings and verbal reasoning abilities. Subsequent analysis of experimental studies of reading comprehension confirmed Thorndike's conclusions and adds the skills of (1) obtaining literal sense meaning from a passage, (2) following the structure (syntax) of the passage, and

(3) recognizing the literary techniques used by an author. Other tests of reading speed and comprehension also confirm these conclusions. Statistical techniques of substrata analysis and regression analysis are criticized for their lack of validity and their misleading conclusions. Thorndike's conclusions are pronounced confirmed and sound, and suggestions are made for applications of these conclusions to techniques and materials for reading instruction. References are cited.

1258. Faust, Margaret; Faust, William L. Pathology or Immaturity--An Evaluation of Changes in Form Copying. In Claremont Reading Conference, Thirteenth Yearbook, Claremont, Calif.: Claremont Graduate School and University Center, 1966. [ED 014 391. Document not available from EDRS. Available from Claremont Graduate School Curriculum Laboratory]

The assumption that reading disability can result from a gap between the developmental maturity of children and the demands of a beginning reading program, carries with it the problem of assessing developmental status. A longitudinal study conducted to derive a method for identifying signs of immaturity related to later reading difficulties used 102 different designs from five known tests of perceptual-motor readiness with 2,000 children in 72 kindergarten to fourth-grade classes. The children's reproductions were analyzed in terms of "plans" which are the various perceptual units each child used in analyzing and organizing a whole design before copying it. Designs too complex for the child's level of maturity yielded plans which were too global, and those in which parts were not well differentiated or in which spatial relations were distorted. Immaturity in perceptual-motor functioning in kindergarten and first grade is part of the normal developmental pattern, and maturity is developed through tactual, visual, and manipulatory experiences. Detailed findings, examples of the children's reproductions, and a bibliography are included in this report.

1259. Finkelstein, Leonard Bernard. The Development of a "Reading Free" Testing Procedure for the Evaluation of Knowledge and Understandings in Elementary School Science. Dissertation, Temple University, Philadelphia, 1967, 188p. [ED 024 563. Document not available from EDRS. Available from University Microfilms (Order No. 68-4505)]

Developed was a "Reading Free" test to evaluate knowledge and understanding of science by elementary school pupils. This study was made because it was suspected that students reading below grade level were unable to indicate fully their science knowledge on conventional tests. The Pictorial-Aural Inventory of Science Knowledge (PISK) was designed with content, vocabulary, and test items similar to the Reading Inventory of Science Knowledge (RISK). Three hundred students (equal numbers of boys and girls) were divided into groups--average, below average, and above average, as indicated by standardized reading test scores. The administration of PISK and RISK were alternated so that the practice of one test upon another would be minimized. Conclusions drawn were that (1)

PISK was a reading free instrument useful in assessing student's understanding and knowledge of elementary school science, (2) RISK scores were highly correlated with reading ability, (3) when reading was controlled, the below average students scored almost as high as the above average group, and (4) boys scored higher on PISK than girls, but not on RISK.

1260. Follman, John; and others. Correlation and Factor Analysis of Critical Reading and Critical Thinking--Fifth Grade. Paper presented at the Annual Meeting of the International Reading Association, Detroit, Mich., May 10-13, 1972, 13p. [ED 065 849]

The purpose of this study was to determine empirically the individual components of critical reading tests and subtests, enabling inferences to be made about the definitions of critical reading and critical thinking and about the relationship between them. The subjects were fifty Hillsborough County, Florida, fifth graders, most of whom were white, and of lower or middle socioeconomic background. Two critical-reading tests, a critical-thinking test, and other aptitude and achievement tests were administered for a total of seventeen subtests. The first statistical analyses of the data resulted in the identification of three interpretable factor groups. Critical reading apparently consists of a complex of language, reading, and thinking activities, particularly vocabulary, reading interpretation, and inference. A group of study skills and computational factors, and a group including items dealing with relevance of evidence and logical thinking processes are the other identifiable factor groups and are separate from critical reading. Explanation of statistical procedures and correlational tables are included. See related document ED 065 848.

1261. Jarvis, Ruth Marie. Construction and Evaluation of a Critical Reading and Thinking Measure for Grades Two and Three. Ed.D. Dissertation, Boston University, School of Education, 1970, 246p. [ED 064 678. Document not available from EDRS. Available from University Microfilms (Order No. 70-22, 477)]

This experiment included the construction and evaluation of a test of critical reading and thinking capable of identifying critical and noncritical readers among children in grades 2 and 3. Fact, fancy and opinion, assumption, relevancy, inference, and generalization were selected as subskill foci, based upon a survey of professional literature and texts designed for children in those grades. Three preliminary forms received trials before the Critical Reading and Thinking Test (CRTT) was finalized. Test reliability was determined at .74 for grade 2 and .87 for grade 3, and correlations for individual subtests ranged from .01 to .46 for second grade and .17 to .59 for third grade. CRTT correlated with reading comprehension for grade 2 boys at .40 and at .43 for grade 2 girls; grade 3 correlations were .37 for boys and .55 for girls. Mental age/CRTT correlations were .36 for both second and third graders. All correlations reported were significant at the .01 level.

1262. Lindamood, Charles H. The Add Test--Auditory Discrimination in Depth. Paper presented at the Third Annual TESOL Convention, Chicago, Ill., March 5-8, 1969, 5p. [ED 032 514]

The ADD (Auditory Discrimination in Depth) test measures the auditory perceptions basic to grasping the logic of the English writing and reading system. If the level of a subject's auditory perception--his ability to code phonemic sequences in both nonsyllabic and syllabic units--can be determined, it can be estimated how much developmental work is going to be needed before the writing and reading task will become comprehensible to him. The ADD test gives both diagnostic and prognostic information in his respect. This test requires the subject to manipulate colored blocks to indicate his perception of the relationships of sounds in oral patterns. The three categories involved are designed to check the ability to (1) discriminate isolated phonemes in sequence; (2) perceive phonemic relationships in a simple, protected syllable; and (3) perceive phonemic relationships in complex syllables. Informal norms suggest that if auditory perceptual judgment is functioning, four-year-olds can handle category one, first- and second-graders can handle categories two and three. Difficulty with category one after five or six years of age is uncommon, but even some adults cannot handle categories two and three. This deficiency has been reflected in almost every instance in poor word attack in reading, and poor spelling skills. See related document ED 028 430.

1263. Mangrum, Charles T. A Comparison of Two Vision Screening Batteries for Clinic and Classroom. Paper presented at the Annual Meeting of the International Reading Association, Anaheim, Calif., May 6-9, 1970, 5p. [ED 040 836]

The degree of correlation existing between visual screening results obtained from the Keystone Visual Survey Telebinocular and the Titmus Biopter Vision Test was discussed. A sample of 59 children admitted to the University of Miami Reading Clinic during the 1969 summer session was used. They ranged in age from 7-16. All subjects were screened with both instruments on the same day, and pass or fail for each student was determined using the criteria suggested by respective publishers. After obtaining point biserial correlation coefficients for the 12 paired subtests from the Keystone and Titmus Tests, it was found that the correlation coefficients were too low to permit substitution of the Titmus for the Keystone instrument in either classroom or reading clinic. Other inexpensive vision screen instruments should be similarly compared with a suitable criterion to determine the feasibility of substituting one of these for the more expensive Keystone. References are included.

1264. Maxwell, Martha J.; Mueller, Arthur C. An Investigation of Factors Associated with the Pumroy Concentration Test. College Park: University of Maryland, 1966, 53p. [ED 013 732]

The relationships between scores on the Pumroy Concentration Test (PCT) and anxiety, reading ability, and perceptual speed and accuracy were investigated. Certain attitudes and problems of those students who scored high and low on the PCT were identified, and the relation between concentration scores and academic achievement and attitudes toward teaching were determined. Sixty-four University of Maryland students were pretested on the Taylor Manifest Anxiety Scale, and on the Minnesota Teacher Attitude Inventory (MTAI). The subjects were each given the PCT, tachistoscopically presented vocabulary exercises, a reading comprehension test, and a post-questionnaire. The PCT task involved concentrating for three minutes on each of three targets--a "T", concentric circles, and a blank. The zero order correlations for each concentration measure--total frequency and total duration score--were examined. There was a significant relationship between the total duration score, the letter recognition task, the T-scope exercise--easy words series, and the positive score for factor IV of the MTAI. The blank target was significantly harder to concentrate on. Anxiety and reading ability were not realted to the concentration measures used. The questionnaires and reading tests used are appended. A review of the literature, tables, and references is included.

1265. O'Connor, William J. The Relationship between the Bender-Gestalt Test and the Marianne Frostig Developmental Test of Visual Perception. Paper presented at the Annual Meeting of the International Reading Association, Boston, April 24-27, 1968, 13p. [ED 022 634]

The relationship between the Bender-Gestalt Test, and the Marianne Frostig Developmental Test of Visual Perception in terms of age, sex, IQ, and socioeconomic status was studied using the Koppitz Developmental Scoring System. A relationship to the Harrison Reading Readiness Test was also explored. Subjects were 89 first- and second-grade children (46 males and 43 females) grouped according to socioeconomic class--upper middle, lower middle, or lower. A relationship between low and average intelligence and test performance was noted. Lower socioeconomic class gave a consistently poor performance in all test areas. It was concluded that the two tests were measuring, to some degree, the same behavior, and, because of their low reliability, it is suggested that they be used together to test perceptual development. Both perception tests were related to the reading readiness test. Specific test variations are noted; further research is recommended. Detailed data tables are included, and references are listed.

1266. Robinson, H. Alan. Identification of Instruments to Measure Selected Factors Related to Success in Beginning Reading of Children of Different Socio-Economic Strata. Chicago: University of Chicago Graduate School of Education, 1965, 60p. [ED 003 463]

A longitudinal study was performed which followed three groups of children (culturally disadvantaged, average, and culturally advantaged) through grade three in an attempt to determine the relative importance of the development of certain perceptual factors on success or failure in beginning reading. Instruments used were selected to identify visual, auditory, and visuomotor abilities, plus the extent of concept formation. Instruments used included the Goodenough Draw-a-Man Scale, Wepman's Auditory Discrimination Test, Metropolitan Readiness Tests, Columbia Mental Maturity Scale, Durell's Letter Discrimination Test, the Word Discrimination Test, the Visuomotor Test, Metropolitan Achievement Tests (reading), the Maico Audiometer, and Visual Efficiency Test with the ortho-rater. Seven of the eleven instruments used were found to be reliable, and the usability of each was recommended for specific types of subjects. Four instruments needed further development or evaluation.

1267. Skager, Rodney W. Objective Based Evaluation: Macro-Evaluation. Paper presented at the Convention of the American Educational Research Association, Minneapolis, Minn., March 2-6, 1970, 8p. [ED 038 710]

Tests are used in four ways: (1) to select, (2) to give rewards or punishments, (3) as tools in the instructional process, and (4) as macro-evaluation of instructional programs and systems. The Program for Research on Objective Based Evaluation (PROBE) is directed at developing prototypic evaluation systems in the reading area for both classroom feedback and macro-evaluation. PROBE materials and procedures are now being developed and will include the following: (1) a complete file of reading objectives covering grades K-6, plus additional objectives involving remedial instruction; (2) a bank of measures of specific reading skills; and (3) a classification system designed to aid the user in finding the particular sets of needed objectives quickly. The PROBE system can be used in both large and small systems. The objective based evaluation systems must be flexible to provide a variety of patterns of use, in terms of content, sequencing, and generality of measurement.

1268. Stodola, Quentin; and others. Administering a Listening Comprehension Test through Use of Teacher-Readers, Sound Film, and Tape Recordings. Fargo, N.D.: North Dakota State University, Grand Forks, N.D.: North Dakota University, 1962, 42p. [ED 003 062]

An experiment was conducted in a typical school situation to determine if variations among teacher presentations of listening tests (reading abilities) have different effects on the results of these tests. Listening tests were administered to pupils of the public schools in Fargo, North Dakota, at the high school, junior high school, and elementary school levels. At each grade level, a listening comprehension test was given by four different methods to groups of five class units to which pupils and teachers had been randomly assigned. The methods were as follows: (1) the regular classroom teacher read the test following the test publisher's directions, (2) the classroom teacher read the test after receiving special training for two hours, (3) the classroom teacher gave the test using a prepared professional motion picture with sound, and (4) the classroom teacher administered the test using a prepared recording, duplicating the audio portion of the movie. Mean scores were determined for each class unit and subjected to analysis of variance. For all levels and units, there was little evidence of presentation differences causing undue variation in test scores. Relative to methods, only at the high school level was there a major difference in scores. Here the movie group scored significantly higher than other groups, indicating greater pupil comprehension.

Cloze Procedure

1269. Bormuth, John R. Development of Standards of Readability: Toward a Rational Criterion of Passage Performance. Final Report. Chicago: University of Chicago, 1971, 219p. [ED 054 233]

The purpose of these studies, sponsored by the Bureau of Research, USOE, was to develop and demonstrate a model for identifying criterion levels of performance that can be rationally defended as being the best level of performance for a particular instructional task. The specific objective was to identify the score on a cloze test that represents the most desirable level of performance on instructional materials.

1270. Bormuth, John R. Empirical Determination of the Instructional Reading Level. Paper presented at the Annual Meeting of the International Reading Association, Boston, April 24-27, 1968, 6p. [ED 020 084]

The first of a series of studies designed to investigate the suitability of instructional materials with regard to levels of difficulty is reported. The study attempted to determine whether some range of difficulty maximized the amount of information students gain as a consequence of reading instructional materials. In order to form 129 pairs according to reading ability, students ranging from grade 3 through graduate level were given a cloze test. One member of each pair was given a cloze readability test over a passage to determine the difficulty of the passage for that pair. The other member of the pair determined how much information that pair gained by reading the passage. He first guessed the answers to a multiple choice test, and then read the passage and took the same test again. Information gain was determined by subtracting the score of his first test from the score of the second. It appeared from the data obtained that it may be possible to establish fairly definite standards of what is a suitable passage for use by a child. It was found that scores on cloze tests do not depend solely on a subject's prior knowledge of the content of a passage. Eight references are given.

1271. Bormuth, John R. Readability--A New Approach. Reading Research Quarterly 1 (1966): 55p. [ED 011 480]

In an effort to develop accurate formulas for predicting and controlling the readability of language, five basic problems were studied: (1) the various features of writing style as linearly related to comprehension difficulties, (2) the change of strengths of relationships as a function of reading ability, (3) readability prediction made upon small language units, (4) readability accuracy based upon use of linguistic analysis techniques in construction of formulas, and (5) a test of usefulness of certain linguistic variables in predicting language difficulty. Twenty prose passages were analyzed to determine the difficulties of 5,181 word, 405 independent clauses, and 365 sentences. Samples were chosen from four passages in each of five subject areas, using the Dale-Chall scale for grades 4 through 8. Five cloze test forms from each passage were constructed by deleting every fifth word. Subjects, the entire enrollment in grades 4 through 8 of one school district in Wasco, California, were matched for five form groups. The testing period lasted over 11 school days. Reading ability was determined by results on the Stanford Achievement Test--Reading, Form J, and studied in relation to the interaction of form groups on measures of word, independent clause, sentence and passage difficulty. Each area was analyzed in detail and tabulated for study in light of the linguistic variables set for the study. A bibliography of 31 items is attached.

1272. Farr, Roger; Smith, Carl B. The Effects of Test Item Validity on Total Test Reliability and Validity. Paper presented at the National Reading Conference, Atlanta, Ga., December 4-6, 1969, 22p. [ED 037 306. Document not available from EDRS. Available as Nineteenth Yearbook of the National Reading Conference, Inc., from Marquette University]

The effects of test-item selection on total test reliability and validity were investigated. It was posited that in a reading comprehension test, the knowledge displayed by the examinees is of interest only as it is a valid measure of how much a student learned from reading or comprehending a stimulus paragraph. Selection of items solely on the basis of the items' difficulty and discrimination is not sufficient, since information gain must be considered. Using procedures developed by marks and Noll for evaluating reading and listening comprehension tests (administration of items without stimulus paragraphs and comparison to results from a later normal administration of the test), the effect on test reliability of deleting poor items was studied. A nonrandom sample of college students (130) and a randomly selected high school sample (110) were administered 36 multiple-choice items from the comprehension subtest of the Nelson-Denny Reading Test, Form A. Later the complete comprehension subtest was given. A cloze test as a validity criterion was developed from the comprehension subtest and given to a random sample of 150 high school students. While deletion of poor items did not increase total test reliability, the implications were that criteria beyond item difficulty and discrimination are required in selecting reading comprehension test items. Tables, references, and test items are included.

1273. Froese, Victor. Cloze Readability Versus the Dale-Chall Formula. Paper presented at the Annual Meeting of the International Reading Association, Atlantic City, N.J., April 19-23, 1971, 12p. [ED 051 975]

The validity of the Dale-Chall readability ratings for sixth-grade science textbooks when compared to an independent criterion of language difficulty expressed in cloze units was examined. The Canadian Lorge-Thorndike IQ Test and the Canadian Test of Basic Skills, vocabulary and comprehension subtest, were administered to 366 sixth graders. Mean IQ scores was 102, while mean scores for vocabulary and comprehension were 6.19 and 6.15, respectively. Passages from twelve science textbooks were subjected to the cloze technique and administered to the subjects. Findings revealed that (1) the twelve cloze passages yielded a reliability coefficient of .79; (2) cloze scores correlated from .55 to .85 with the intelligence measure; (3) cloze scores correlated from .64 to .86 with vocabulary, and from .52 to .85 with comprehension; (4) the cross-validation coefficient of .90 obtained by Dale and Chall and the cross-validation coefficient of -.29 obtained in this study are significantly different beyond the .01 level of confidence. Major conclusions were (1) that the cloze tests are reliable measures of language difficulty, and (2) that the Dale-Chall readability formula is not a valid measure of sixth-grade science textbook materials when the cloze procedure is used as a criterion. References are included.

1274. Fry, Edward B. The Readability Graph Validated at Primary Levels. Cambridge, Mass.: Harvard University, Graduate School of Education, 13p. [ED 023 565]

The validity of Fry's readability graph for determining grade level readability scores was compared with the Spache formula, the cloze technique, and oral reading, in the case of seven primary-level books. Descriptions of these four indicated that to determine grade level, Fry's readability graph plots the total number of sentences for a 100-word passage. The materials used for comparative analysis were selected cloze passages read aloud by thirty primary grade children. Percent of errors was recorded for reading of the words not deleted, and grade level readability scores were computed by the readability graph and the Spache formula. Rank order correlations showed highly consistent correlations for all four methods. The readability graph yielded about the same level scores as the Spache formula. The cloze method was judged to be the most accurate and the most capable of making fine distinctions; however, its use is limited because it requires a group of subjects to read the selections for evaluation at a given time. Tables and references are included. This research was funded under Title III of ESEA.

1275. Hater, Mary A.; and others. The Cloze Procedure as a Measure of the Reading Difficulty of Mathematical English Passages. Final Report. Ohio: College of Mount Saint Joseph-on-the-Ohio, 1972, 66p. [ED 071 056]

The purpose of this study sponsored by the Bureau of Research, USOE, was to verify that mean cloze scores predict the reading difficulty of passages written in mathematical English. Twenty-two mathematical passages exemplifying different writing styles and content were selected from instructional materials written for upper elementary school and junior and senior high school. Using a fifth-word or symbol-deletion pattern, two cloze forms were constructed for each passage, and one multiple-choice reading test developed for each passage. Subjects from grades seven through ten in fourteen schools were randomly assigned to groups as defined by the forty-four different cloze forms, two for each passage. Each subject responded to cloze tests on one day, and a week later the subject read the complete passage and took a comprehension test on the passage. The results of the study indicated that the reading comprehension tests are reliable measures to test the validity of cloze tests for the difficulty of mathematical English. The reliabilities of all cloze tests are very high. Cloze tests can be used as predictors of reading difficulty for mathematical English content.

1276. Hater, Mary Ann; Kane, Robert B. The Cloze Procedure as a Measure of the Reading Comprehensibility and Difficulty of Mathematical English. Lafayette, Ind.: Purdue University, 1970, 25p. [ED 040 881]

The purpose of this study was to validate the cloze procedure as a measure of the comprehensibility and difficulty of mathematical English. The authors point out that the cloze technique cannot readily be applied to mathematical English as it can to ordinary English, since this technique is not defined to include deletions of mathematical symbols, and mathematical English has no definite ordering of words. Results supported the hypothesis that cloze tests over mathematical English passages are highly reliable measures and valid predictors of the reading comprehensibility of mathematical English passages for grades 7-12. There was also sufficient evidence to suggest the conclusion that cloze tests are valid predictors of reading difficulty for mathematical English passages at these grade levels.

1277. Jongsma, Eugene R. The Cloze Procedure: A Survey of the Research. Bloomington: Indiana University, School of Education, 46p. [ED 050 893. Also available from The Reading Program, 222 Pine Hall, Indiana University, Bloomington, Ind. 47401 ($1.00)]

The purpose of this study is to survey research literature concerning the use of the cloze procedure, and to determine what is known about the procedure. The survey proceeds in three broad areas: (1) methodological considerations, (2) cloze as a measuring device, and (3) cloze as a teaching technique. It is concluded that cloze based on every -n(th) deletion correlates more highly than based on selective deletions, and that scoring of exact replacements is the most useful scoring system. The author reports that the cloze procedure is a valid and reliable measure of comprehension ability. He also feels that the most significant contribution the cloze procedure has made to reading research is in the aspect of readability, and this signals cloze as an important tool in the study of language. Further research is recommended to examine the construct validity of the cloze procedure and to investigate various used of the cloze (1) to measure information gain, (2) to measure listening comprehension, and (3) to explore the relationship of factors such as literary style and attitude to comprehension. The author has found little research done on cloze procedure as a teaching technique, and this research evidence does not suggest the cloze as an effective teaching technique.

1278. Kirby, Clara L. Using the Cloze Procedures as a Testing Technique. Paper presented at the Annual Meeting of the International Reading Association, Boston, April 24-27, 1968, 13p. [ED 019 202]

The study was designed to determine whether scores from a cloze test would differ significantly from scores on selected standardized silent and oral reading tests. Pupils in grades 1 through 6 in an elementary school in the Midwest (N-178) served as subjects. The mean IQ for the total group was 101.7. The variables considered were sex, reading achievement, ability level, and grade level. The Gates Reading Test, and a cloze test were administered during a six-week period. Mean differences among the four instruments were significant for grades 1 through 4, between sexes, low-ability students, and able and less able readers. There were no significant differences among the mean scores on the instruments at the fifth- and sixth-grade levels, for high ability students, or for outstanding readers. Mean scores on the cloze test did not differ from the Gilmore Test at any level, or for any level, or for any subgroup. Mean scores on the cloze test did not differ significantly from those on the Gates Reading Tests except in grades 1 and 2. Mean scores on the cloze test differed significantly from those on the Gray Oral Reading Test for the total sample, grade 1, grade 3, girls, able readers, and less able readers. Inspection of rank order of the means for the total sample and for all subgroups revealed a generally consistent pattern. Conclusions and references are included.

1279. Potter, Thomas C. A Taxonomy of Cloze Research, Part I: Readability and Reading Comprehension. Inglewood, Calif.: Southwest Regional Educational Laboratory, 1968, 52p. [ED 022 644. Document not available from EDRS. Available from Southwest Regional Laboratory for Educational Research and Development, 11300 La Cienega Blvd., Inglewood, Calif. 90304]

General information about the cloze technique and summaries of experiments with adults and children in which it was used are presented. Results indicated that the most valid and reliable cloze test for measuring passage difficulty is one in which (1) an every -n(th) mechanical mutilation system is used, (2) not more than twenty words in every 100 are deleted, (3) passage length is at least 250 words, (4) at least fifty words are deleted in order to insure adequate sampling of passages, and (5) the exact word deleted is indicated as the most useful and efficient scoring criteria. It was also indicated (1) that deletion ratios of 1.10 and 1.12 in longer passages may be valid for certain purposes, (2) that scoring systems other than the exact word (synonym, form class) provide less interscorer reliability and require more time, and (3) that the separate scoring of form classes or content and function words may provide specific information for specialized purposes. Further research is recommended. A bibliography is included.

1280. Potter, Thomas C. A Taxonomy of Cloze Research, Part I: Readability and Reading Comprehension. Inglewood, Calif.: Southwest Regional Educational Laboratory, 1968, 51p. [ED 035 514]

An overall look is taken at the cloze research method as a new tool for measuring readability. The construction of a cloze readability test is described, as well as several studies made on the reliability and validity of such tests. Included also are some methodological considerations to be kept in mind when constructing a cloze test. Data are reported from some cloze technique investigations, using children from first grade through high school, and adults from a variety of populations, which suggest that the cloze technique is applicable to many types of communication, and that it can be used to discriminate among the readability levels of passages and among the reading comprehension levels of readers. A description is given of the most valid and reliable cloze test for measuring passage difficulty as shown by research. It is suggested that more research must be done in several fundamental areas about this relatively new technique and that there are several new areas in which the technique may be used. A bibliography is included.

1281. Rankin, Earl F. Grade Level Interpretation of Cloze Readability Scores. Paper presented at the National Reading Conference, St. Petersburg, Fla., December 3-5, 1970, 12p. [ED 046 657. HC not available from EDRS. Available in the Twentieth Yearbook of the National Reading Conference, Inc., from Marquette University]

Two studies were conducted to investigate the use of a technique for providing a grade-level interpretation for cloze readability scores. In the first study, Bormuth's cloze-test criteria were compared with the results of the Fry and Dale-Chall readability formulae. A total of 133 students in grades 4 to 8 were required to read a 250-word passage with every fifth word deleted. The results indicated a fairly close correspondence between Bormuth's 44 percent criterion for cloze readability analysis and the readability formulae. In the second study, a method devised by the writer was used. The Informal Cloze Readability Inventory (ICRI) uses materials of unknown difficulty to be read by readers of known reading ability in order to evaluate the readability of a book. The ICRI and the paragraph meaning subtest of the Stanford Reading Achievement Test were given to groups of six average readers in grades 4 to 6. When cloze instructional levels were analyzed, they did not appear to be very different from the readability levels as measured by the readability formulae. It was concluded that valid readability assessments can be made using the ICRI based on a small number of subjects. References are included.

1282. Rankin, Earl F.; Dale, Lothar H. Cloze Residual Gain--A Technique for Measuring Learning through Reading. Paper presented at the National Reading Conference, Los Angeles, Calif., December 5-7, 1968, 15p. [ED 026 227. Document not available from EDRS. Available in the Eighteenth Yearbook of the National Reading Conference]

One hundred and seventy-four Texas Christian University developmental reading students participated in an investigation which applied the residual gain technique to individual reading gains as measured by the cloze procedure. Comparisons were made between cloze crude gains and cloze residual gains, and between cloze tests constructed with lexical versus structural deletions. Correlations of gains with a multiple-choice knowledge test and with the Davis Reading Test were studied. The following conclusions were reached: (1) the cloze test was a valid measure of prereading and postreading knowledge; (2) the cloze test was a highly sensitive measure of reading gain; (3) the use of the residual gain technique was justified; (4) there was a significant negative correlation between initial status and cloze crude gains, but no correlation between initial status and cloze residual gains; (5) crude cloze residual gains did not bear a meaningful relationship to post-reading knowledge tests or to standardized reading tests; (6) structural cloze residual gains did bear a desirably low but significant correlation with postreading tests and standardized reading tests; and (7) lexical cloze residual gains were related to postreading knowledge tests but not to standardized reading tests. References are included.

1283. Ratekin, Ned H. The Adequacy of the Cloze in Measuring Comprehension of Different Logical Patterns. Paper presented at the National Reading Conference, Tampa, Fla., December 1971, 11p. [ED 061 012. HC not available from EDRS. Available from National Reading Conference, Inc., Marquette University]

Differences between comprehension of inductively presented material and of deductively presented materials as reflected by scores on multiple-choice and cloze tests of comprehension were sought using specifically constructed materials. The Logical Patterns Test was designed with a series of multiple-choice tests in one section and a series of cloze tests in another. Each section has a deductive and inductive part. Subjects, 33 college freshmen and sophomores, were given the test in two sessions. Data for the four subtests were analyzed using t-tests and correlation procedures. Significant differences were noted for presentation methods in both test types, the deductive passages being consistently more difficult. Examination of correlations among subtest scores revealed that multiple-choice tests appear to discriminate between comprehension of both presentation methods to a greater extent than do cloze tests. Tables and references are included.

1284. Weintraub, Samuel. The Cloze Procedure. Newark, Del.: International Reading Association, March 1968, 4p. [ED 027 145. Document not available from EDRS. Available in The Reading Teacher 21 (1968): 567p.]

Several studies on the use of the cloze procedure as a measure of readability and of comprehension are reviewed. These studies showed (1) that the cloze procedure provided a more reliable measure of readability for nonstandard reading materials than the commonly used readability formulas, (2) that cloze tests are valid and reliable predictors of the difficulty level of reading materials, and (3) that scores on comprehension tests correlate highly with cloze readability scores. These findings indicated that the cloze procedure could be used effectively as a measure of readability and of comprehension. The cloze procedure helps teachers adapt the appropriate reading material for a particular pupil or group of pupils and can offer new insights into the reading process. The references used are cited in a bibliography.

Predictive Ability

1285. Aftanas, M.S.; and others. A Study of the Psychological and Social Factors Related to Preschool Prediction of Reading Retardation. Paper presented at the National Convention of the Canadian Psychological Association, Winnipeg, Manitoba, May 28, 1970, 13p. [ED 041 976]

This paper presents some of the preliminary findings of a longitudinal study for the determination of a set of measures, which could be used to predict specific reading problems and general school achievement. The samples selected for study were from different socioeconomic groups. The paper deals specifically with the socioeconomic differences observed for the psychological and reading measures, and reports some of the relationships found between the preschool measures and the criterion-reading measures. The groups studied were kindergarten samples from four different urban schools. Tests administered included the Stanford-Binet, Bender Gestalt, Hooper Visual-Organization, Draw-a-Person, Kinesthetic Perception, Corp-Clark Reading Series, Schonell Word Recognition, and McGahan's Early Detection Inventory. Implications of the test results are considered to indicate that the socioeconomic variable would be considerably important in any study attempting isolation of predictors for reading problems. It is also held that socioeconomic groups would have to be analyzed separately to determine the best differentiating measures for that group.

1286. Bilka, Loisanne P. An Evaluation of the Predictive Value of Certain Readiness Measures. Paper presented at the Annual Meeting of the International Reading Association, Atlantic City, N.J., April 19-23, 1971, 12p. [ED 053 869]

Three hundred and fifty-three Pittsburgh School Children were randomly assigned to nine classes taught by the basal approach, and nine classes taught by the integrated experience approach. Five readiness measures were administered at the beginning of the first grade, and the Stanford Achievement Tests were given in May of first, second, and third grades. Analysis of the data yielded the following findings: (1) significant relationships existed between the predictor variables and the criterion variables of reading achievement; (2) the Murphy Durrell Readiness Test and the Metropolitan Readiness Tests were the strongest contributors to prediction; (3) when unique subtests of the two tests were combined, the combination of the word meaning subtest of the Metropolitan with the three subtests of the Murphy Durrell resulted in the highest prediction-achievement correlation; (4) correlation between prediction and achievement did not drop significantly from grade to grade; (5) sex, mental age, and instructional method did influence the prediction accuracy; (6) the Pintner Cunningham Primary Test made a moderate contribution prediction; and (7) the Banham Checklist and Thurstone Jeffrey Tests were not adequate predictor instruments. References are included.

1287. Black, Bob Gene. Determining the Predictive Value of Selected Measures for First Grade Reading Success. D.Ed. Dissertation, North Texas State University, 1971, 134p. [ED 073 438. Document not available from EDRS. Available from University Microfilms (Order No. 72-4063)]

This study investigated the predictive value of certain tests in relationship to first grade reading success. The Metropolitan Readiness Test, Naming Letters Test, Light Response Test, and Matching Symbol Test were administered to seventy first-grade students during the first two weeks of school. The Teacher's Reading Readiness Rating Scale was filled out by each of the subjects' teachers at the end of seven weeks. The seventh predictor test was computed by finding the difference in individual scores of the Light Response Test and Matching Symbol Test. The Gray Oral Reading Paragraphs Test, and the Gates-MacGinitie Reading Test, administered during the last four weeks of school, were used to measure the effectiveness of the predictive tests. The results indicated that (1) the Metropolitan Readiness Test is one of the best single predictors of first-grade reading success; (2) the tests that measure specific aspects of the reading process are the best predictors of first-grade reading success; (3) workbooks of the matching symbol type are not likely to improve first-grade reading success; (4) age is a significant factor in the speed of matching symbols at the age of six; and (5) the naming of a selected group of capital and lower case letters is a good predictor of first-grade reading success.

1288. Blai, Boris, Jr. Interpreting Nelson-Denny Reading Test Scores. Bryn Mawr, Pa.: Harcum Junior College, 1970, 2p. [ED 057 090]

Reading test results and their interpretation are stressed because of their importance in student achievement. The Nelson-Denny Reading Test used at Harcum Junior College is a useful measuring instrument for predicting academic achievement, screening students, and diagnosing reading and learning problems. General hints for interpretation of the reading test results are presented.

1289. Blai, Boris, Jr. The Nelson-Denny Reading Test and Harcum-Earned Academic Averages. Bryn Mawr, Pa.: Harcum Junior College, 1971, 2p. [ED 057 089]

Research shows that there is a substantial degree of correlation between scores obtained on the Nelson-Denny Reading Test and the academic averages obtained by freshman students at Harcum Junior College. This indicates that the reading test is a useful measuring instrument for predicting general levels of first-year academic achievement.

1290. Chapman, Robin S. Report on the Fall, 1970, Version of the Wisconsin Basic Prereading Skill Test. Report from the Project on Reading and Related Language Arts Basic Prereading Skills: Identification and Improvement. Madison: University of Wisconsin Research and Development Center for Cognitive Learning, 1971, 23p. [ED 065 538]

This report, sponsored by USOE, summarizes the findings of a Fall, 1970, administration of the basic prereading skill test to 162 entering kindergartners. The test is being developed to diagnose prereading skill deficits in kindergartners, and to predict end-of-first-grade reading achievement. Included in the fall administration were subtests for attending to letter order, letter orientation, and letter-string detail, and for segmenting sound sequences. A test for letter-naming ability was included for comparison to previous versions of the test, but will not be retained in the final version. Results are presented and the implications for test revision discussed.

1291. Feldmann, Shirley; Weiner, May. Measurement of Reading Skills in Lower Socioeconomic Status Children. 1963, 15p. [ED 002 599]

A reading prognosis test to measure future ability, based on present skills and knowledge, of children from different socioeconomic levels was conducted. It sought to avoid two major shortcomings of standardized reading readiness tests: (1) that children of low socioeconomic level were included in the norms, and therefore scores of these children were not only at the low end of the scale but were clustered among a few numbers; and (2) that no clear differentiation among underlying skills was given. A sample of children was drawn, with equal numbers from lower and middle socioeconomic levels. The test was constructed to yield scores in three areas, all containing subareas. Two of these, perceptual discrimination and language, were designed to measure skills necessary to both beginning and advanced reading. The third area, beginning reading skills, was designed to measure the child's present status. Three studies were undertaken. In each case, later in the school year a reading achievement test was used as a validity criterion. Normal variability was found in all socioeconomic groups. It was concluded that potentially poor readers can be identified before formal training in reading takes place, and that their skill deficiencies can be ascertained. Tables giving test scores and intercorrelations were included.

1292. Fry, Edward. A Readability Formula That Saves Time. 1967 Yearbook of the National Reading Conference, 1967. [ED 016 582. Document not available from EDRS. Available from the National Reading Conference]

A revision of the readability graph with directions for its use, and validity data, are presented. The use of the graph involves word samples, number of sentences, and number of syllables. The latter two are plotted on a graph to ascertain grade levels. The correlations of the readability graph with the Dale-Chall, Flesch, and Spache formulas are reported. A sample graph, tables, and references are included.

1293. Gruen, Ronald Steven. Prediction of End-of-Year Reading Achievement for First- and Third-Grade Pupils. Ed.D. Dissertation, The Pennsylvania State University, University Park, 1971, 160p. [ED 066 715. Document not available from EDRS. Available from University Microfilms (Order No. 72-13, 859)]

This study was designed to select and explore a research battery which, when administered at the beginning of the school year, more adequately predicts end-of-year reading achievement than have previously-used tests and test batteries. The tests used were perceptual-motor and cognitive-intellectual, with the most adequate predictor tests identified separately for first- and third-grade boys and girls. Hypotheses investigated were that perceptual-motor abilities are significantly related to reading achievement at the early stages, while cognitive-intellectual abilities become more important later in the reading process. Included in the document are detailed results of the various tests used which indicate that perceptual-motor scores are higher than cognitive-intellectual scores in the first grade, but cognitive-intellectual scores are higher than perceptual-motor scores in the third and fourth grades. The author also concludes that the prediction equations derived could be used with confidence with new samples from the same population.

1294. Harckham, Laura D. Development of Teacher Evaluation Scales to Predict Reading Success of Pupils in Primary Grades. Bronx, N.Y.: Fordham University, 1970, 144p. [ED 040 845]

A longitudinal study was undertaken to determine whether measures that are readily available in most school districts, administered in kindergarten by classroom teachers, could predict reading achievement as measured by standardized tests in grades 1 through 4. The subjects were 553 children in the kindergarten class of 1964-65 in Ithaca, New York. They were given the Metropolitan Readiness Test, including the Goodenough Draw-A-Man Tests, a ranking by the teacher, and a rating on a composite behavior rating scale. Achievement measures were the Metropolitan Achievement Test in grade 1 and the Stanford Achievement Test in grades 2 through 4. Among the findings were that the Metropolitan Readiness Test was the best single overall predictor, and alphabet and numbers subtests were the best subtest predictors. A bibliography and tables are included. This study was sponsored by the Bureau of Research, USOE.

1295. Harckham, Laura D.; and others. Multiple Prediction of Reading Achievement in Grades One through Four Using Kindergarten Measures. Paper presented at the Annual Meeting of the American Educational Research Association, New York, February 1971, 11p. [ED 049 311]

A longitudinal study of 553 children, from kindergarten through grade 4, was conducted to determine whether measures readily available in school districts, taken in kindergarten by classroom teachers, could predict reading achievement on standardized tests in succeeding grades. Scores on the Metropolitan Readiness Test, the Draw-A-Man Test, a behavior rating scale, and teacher rank were used in multiple correlation and regression and discriminant function analyses. The Metropolitan was the best predictor, with a correlation of .74 for third grade. The Draw-A-Man was poor, and others yielded correlations in the .40s and .50s. Multiple discriminant analysis confirmed overlap among predictors and the strength of the Metropolitan as best predictor. Further research to determine sources of unaccounted variance is suggested.

1296. Hoepfner, Ralph; Strickland, Guy P. Investigating Test Bias. Los Angeles: University of California, Center for the Study of Evaluation, 1972, 35p. [ED 066 443]

This study investigates the question of test bias to develop an index of the appropriateness of a test to a particular socioeconomic or racial-ethnic group. Bias is defined as an item-by-race interaction in an analysis-of-variance design. The sample of 172 third graders at two integrated schools in a large California school district, included 26 white students, 20 blacks, 64 Mexican-Americans, and 37 Orientals. In order to obtain the initial information about item-by-race interaction, the Stanford Achievement Test, paragraph meaning subtest was used. Item regression data for six racial pairings were inspected: whites/blacks; whites/Mexican-Americans; whites/Orientals; blacks/Mexican-Americans; blacks/Orientals; and Mexican-Americans/Orientals. Various methods of establishing the existence and nature of test bias are discussed, with the conclusion that test bias cannot be conclusively demonstrated in a wholly satisfactory manner. One method was nontheless selected and applied to test items administrated to two field-test schools for the purpose of investigating bias. The results of that small-scale study are discussed, but do not offer compelling reasons for the observed racial-ethnic differences.

1297. Janzen, Henry L.; Johnston, Edwin F. The Use of Reading Tests for Entrance and Placement Testing in a Community College. Calgary, Alberta: Mount Royal College, 1970, 18p. [ED 041 951]

Mount Royal College, a Canadian Community College, has an open door policy on admissions. Hence it needs a strong counseling division in order to place entering students at appropriate skill levels. Since the American College Testing Program tests have seen limited use in Canada, research is needed to establish and validate local norms. The usefulness of the Cooperative English Test (reading) and Van Wagenen Scales in the prediction of both freshman English grades and freshman grade point averages is investigated here. Their predictive value was found to be extremely low. Nonetheless, the test scores were found to have some limited utility in the counseling process, and this may be enhanced by further research on the local norms collected on students that have entered the college since 1966.

1298. MacGinitie, Walter H.; Tretiak, Richard. Measures of Sentence Complexity as Predictors of the Difficulty of Reading Materials. Proceedings of the 77th Annual Convention of the American Psychological Association, 1969, 2p. [ED 038 254]

An attempt to predict reading difficulty with various grammatical measures showed that the relatively crude measure of sentence length is still the most indicative. Yngve's phrase structure measurement and Allen's "sector analysis" were used on eighty selected passages and were compared to the Lorge Readability Formula in terms of tests based on the passages, which were administered to college students. Each of the eighty test lessons was analyzed for twelve predictor variables based on Lorge's concern with hard words, number of prepositional phrases, and sentence length, as well as on maximum depth and total storage as determined by both the Yngve and the Allen systems. Yngve is concerned with the nodes and depth of transformational analysis, and Allen deals with levels between sentence and words. Both measures of depth were not as closely correlated to test scores as was sentence length; both the measures of total storage were so closely correlated to sentence length that they were no better as predictors of reading difficulty. Hard words ratioed to depth measures gave less dependable prediction than hard words ratioed to sentence length. Lorge's prepositional phrase count, however, was insignificant as a predictor in this study. References are included.

1299. Merrell, Hal B. A Potential Means of Reducing the Incidence and Degree of Reading Retardation in Public Schools. Final Report.

Tulsa: Tulsa University, 1969, 43p. [ED 041 723]

This study, sponsored by the National Center for Educational Research and Development of the Department of Health, Education and Welfare, was designed; (1) to determine if the Wepman Auditory Discrimination Test and a group modification of the test would produce the same measure of auditory discrimination ability; (2) to determine if either the individual or group version of the test can be used to predict reading achievement; and (3) to obtain information relating auditory discrimination to age, race, and socioeconomic status. Subjects were 180 children from four to eight years old who represented high and low socioeconomic status, and the Caucasian and Negro races. From analysis of individual and group discrimination scores, and Stanford Reading Achievement Test data, came these four main results; (1) the individual Wepman Auditory Discrimination Test and its group modification cannot be used interchangeably; (2) neither version of the Wepman test predicts reading achievement reliably enough to use as a device for preselection of children for special reading therapy; (3) privileged Caucasian children have better auditory discrimination than underprivileged Negro children; and (4) underprivileged Caucasian children have better auditory discrimination than underprivileged Negro children. A bibliography is included.

1300. Ollila, Lloyd; and others. The New Canadian Reading Readiness Test Research. 1972, 17p. [ED 062 104]

A Canadian study designed to develop a reading readiness battery which would include proven types of prereading measures and newly conceived predictors is discussed. The goals of the study were to identify and develop indexes of reading task, his perceptual ability, his linguistic competence and his level of cognitive functioning; to determine the factorial nature of the domain of reading readiness; and to determine the best combination of tests to predict reading achievement. Thirteen tests of specific skills and abilities were grouped into one battery and administered to 97 elementary school students from various school districts. Test results were correlated and factor analyzed. It was found that one general readiness factor accounted for nearly one-half the total variance of the tests. Three additional factors were identified: listening, conceptualizing, and literacy behavior. It was concluded that to serve a diagnostic function, a readiness test must have a range of subtests. Tables and bibliography are included.

1301. Olson, Arthur V.; Rosen, Carl L. Exploration of the Structure of Selected Reading Readiness Tests. Paper presented at the Annual Meeting of the American Educational Research Association, New York, N.Y., February 1971, 9p. [ED 044 448]

A variety of factor analysis techniques was employed to explore the structure of five reading readiness instruments (Gates Reading Readiness Test, Developmental Tests of Visual Perception, Metopolitan

Readiness Tests, specially constructed readiness test by Olson, Wechsler Intelligence Scale for Children) as predictor of variables of performance on the Stanford Achievement Test-Primary I, a commonly-used achievement test in reading at the first-grade level. The identification of abilities that might underlie various readiness measures was of particular interest. The six instruments were administered to 218 first-grade children representing a stratified sample of the socioeconomic makeup of three elementary schools in a southeastern city of 45,000 people. Four major factors were isolated: verbal-conceptual, auditory-visual association, specific readiness, and specific perceptual organization. These results are discussed in terms of previous reading readiness research. It is concluded that there continues to be a need for investigations of reading readiness constructs with the goal of further isolating those factors which seem most critical to specific reading behaviors at particular points in the developmental sequence.

1302. Redfield, David D.; and others. CAI Word Rate: Student Ability as Predictors of Achievement. Technical Report Number 2, ISCS. Tallahassee: Florida State University, Department of Science Education, 1970, 30p. [ED 042 357]

Twenty-seven seventh-grade students participated in a study designed to investigate the student rate of progress through the computer-assisted instruction (CAI) text in relation to ability and achievement. Measures were developed to determine the general reading rate for each individual, and to notice any deviation from that rate. It was found that word rate and word rate stability as measures of reading behavior predict science achievement with greater efficiency than the Metropolitan Achievement Test for reading. The word rate measure also appears to have more predictive power than latency. Appendices contain statistical data collected by the study and a reference list. This study was sponsored by the National Science Foundation.

1303. Silberberg, Norman; and others. The Predictive Efficiency of the Gates Reading Readiness Tests. The Elementary School Journal (1968): 213-218. [ED 024 550. Document not available from EDRS]

A study was conducted to determine which subtests of the Gates Reading Readiness Tests have greatest predictive efficiency. An experiment to assess the effect of training in reading readiness on 222 kindergarten children (107 girls and 115 boys) provided the data for the research. The experimental group received two months' reading readiness training; the control group received none. Both groups were tested in April, June, and October. It was found that the ability can be predicted almost wholly with the letters and numbers subtest. It is suggested that this one test be used to save time. It is also suggested that if similar tests are similarly analyzed, and those portions which provide redundant or slight information are eliminated, total testing time may be greatly reduced.

1304. Snodderly, Donald Elvin. The Relation of Teachers' Stated Confidence in Reading Readiness Tests to Pupil Achievement in Reading. Ed.D. Dissertation, Columbia University, New York, 1972, 119p. [ED 065 852. Document not available from EDRS. Available from University Microfilms (Order No. 72-18, 902)]

The relation between first-grade teachers' stated confidence in the predictability of reading readiness test scores and their pupils' achievement in beginning reading was the basis of this study. The experiment required (1) a survey of 341 first-grade teachers to obtain a measure of their stated confidence in reading readiness test scores as predictors of reading achievement, (2) identification of thirty teachers who stated high confidence and thirty teachers who stated low confidence in the predictability of reading readiness scores, and (3) a statistical analysis of reading readiness scores and reading achievement scores for the pupils of both groups of teachers. Some of the results indicated that there were no significant differences for high and low scoring pupils across teacher confidence groups; that there were no significant differences across or within confidence groups for the total group of pupils according to sex; and that there was no evidence that the expectancy effect is global in its operation.

1305. Thorndike, Robert L. Reading Comprehension across National Boundaries. 7p. [ED 064 351]

Some aspects of the results from IEA studies of reading are discussed. The instruments used in the studies were a reading comprehension test of the conventional type, and a short reading speed test. The studies were conducted with ten and fourteen year-olds and individuals in the last year of secondary school. A supplementary measure, same-opposite vocabulary test of forty words, was also used at each level. Among the fifteen countries that participated, twelve different languages were represented. Difficulties encountered, results for the United States, between-county differences, and between-schools differences are discussed. Predictors of reading achievement are discussed from the standpoint of their effectiveness.

Performance Criteria

1306. Barham, Frank E. The Virginia Project: Guaranteed Student Achievement in Reading. Paper presented at the Annual Meeting of the International Reading Association, Detroit, Mich., May 10-12, 1972, 21p. [ED 063 097]

The concept underlying this performance contract program was based on maximizing the time students spend actively participating in learning activities, and providing them with direct and immediate feedback or reinforcement. Continuous diagnosis and prescription were utilized to select materials and give intensified instruction by adjusting the content, level, and learning rate for each pupil. Materials were constantly manipulated and modified for self-directing and self-correcting experiences. Selected to participate in the project were 250 students from two schools which had a major population from black, low socioeconomic families. All of the students were to meet the criteria of being more than one year retarded in reading, with an IQ above 75. Involved personnel took part in a week of pre-service activities, with the actual instruction of students lasting approximately six months. Comparison of pretest and posttest results indicated that the achievement gains were significant and encouraging: 39 percent of the pupils gained 0.6 years or more, and another 39 percent gained from 0 to 0.5 years. Findings of a follow-up study and a list of references are included.

1307. Carver, Ronald P. The Criterion-Referenced Aspects of the Carver-Darby Chunked Reading Test. Paper presented at the National Reading Conference, St. Petersburg, Fla., December 3-5, 1970, 8p. [ED 047 911. HC not available from EDRS. Available from Twentieth Yearbook of the National Reading Conference, Inc., Marquette University]

In addition to using chunked items, the Carver-Darby Chunked Reading Test differs from the traditional reading test in the way it was developed and the manner in which the test scores are interpreted. The criterion for developing and revising test items was based on the inability of the readers to answer the test items correctly after reading the passages. Interpretation of the test depends on three scores: (1) the efficiency score, i.e., the number of incorrect chunks out of 100 possible that the individual correctly identifies during the 25-minute test period; (2) rate, which is determined by the number of the last item attempted; and (3) accuracy, which is the percent correct. Using these scores, the reader can be classified as efficient-inefficient, rapid-slow, and accurate-inaccurate, which yields six possible categories of mature readers. Although there is no empirical research which supports this particular categorization, speculative judgments are made concerning them with the hope of stimulating definitive research. References are included.

1308. Dembo, Myron H.; Wilson, Donald E. An Evaluation of a Performance Contract. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, Ill., April 1972, 28p. [ED 064 387]

This paper reports an evaluation of a performance contract in reading with 2,500 seventh-grade students. Seventy-five percent of the students were to increase their reading speed five times over their beginning level with 10 percent more comprehension after three months of instruction. Results indicated that only 13 percent of the students reached this objective. Analysis of the program found many invalid evaluation techniques used to assess student achievement. Issues discussed are the appropriateness and selection process of the program, negative teacher attitudes toward the program, and the program's failure to provide for the individualization instruction. Recommendations are provided to assist school districts in developing performance contracts.

1309. Fischbach, Thomas J. Study of Relationships of Reading Mastery Level to General Reading Achievement to Validate Diagnostic Reading Tests. Madison: University of Wisconsin, Research and Development Center for Cognitive Learning. Paper presented at the Annual Meeting of the American Educational Research Association, New York, February 1971, 24p. [ED 049 285]

The validity of the word attack skill tests of the Wisconsin design for reading skill development is studied at six grade-levels by an investigation of the relationship of these to several widely known achievement tests. The basic notion is that reading mastery scores derived from the diagnostic tests should be positively related to the achievement scores in a simple manner. The requirements implied by this notion are specified, and the procedures for examination of data to determine extent of agreement are described. The results of the analysis indicate that the requirements are fulfilled in all but one case. The main conclusion is that the validity of the word attack subtests is supported by the data. This study was sponsored by USOE.

1310. Guttinger, Hellen; and others. An Experiment in Developmental, Individualized Reading: An Alternative to Performance Contracting. Gainesville, Fla.: University of Florida, P.K. Yonge Lab. School, Research Monographs, Volume 1, No. 1, 1972, 41p. [ED 070 048]

In this evaluation of the effectiveness of a developmental, individualized reading program in grades six, eight, nine, and eleven, emphasis was placed on diagnostic and prescriptive procedures within a laboratory setting. Interaction between students and teacher-counselors was on a one-to-one basis. The nine-week program included pretesting, individual planning conferences, six weeks of laboratory experience, posttesting, and final evaluation conferences. The results showed reading rate gains to be significant at all four grade levels. Sixth-graders gained 2.6 months in story comprehension and 4 months in paragraph comprehension. Gains in two sections at the other three levels were significant. Mean gains in vocabulary were significant in four of the ten sections at the four grade levels. Complete statistical data, a list of materials and equipment, cost analysis, and a workshop model are included in the appendices.

1311. Hall, G.R.; and others. A Guide to Educational Performance Contracting. Santa Monica, Calif.: Rand Corporation, 1972, 77p. [ED 060 391. Also available from Communications Department, Rand Corporation, 1700 Main Street, Santa Monica, Calif. 90406 ($3.00)]

This report, sponsored by the Department of Health, Education and Welfare, is distilled from Rand's findings in previously reported research, and from new research. It is addressed to school board members, administrators, and other educational decision-makers who may be contemplating a performance contracting program. The guide follows the life cycle of a project, and identifies the three major phases as planning and contracting, operation, and evaluation. Planning and contracting activities discussed are (1) legal research, (2) assessment of needs, (3) requests for proposals, (4) proposals, (5) selection of learning system contractor (LSC) or other program participants, and (6) determination of contracts. Program operation events considered are (1) selection of schools, (2) personnel selection, (3) teacher training, (4) student selection and transfers, (5) program monitoring, and (6) promoting awareness of the program. Considered under the evaluation phase are (1) program validation, (2) settlement of the LSC contract, (3) program evaluation, and (4) the decision about the future of the program. The second part of this guide (technical appendix, ED 060 392) provides more technical detail on the problems of test and measurement and cost analysis associated with performance contracting programs. Related documents are ED 050 496-497 and ED 056 247-252.

1312. Hamilton, Jean F. Evaluating Reading Growth. Paper presented at the Annual Meeting of the International Reading Association, Detroit, May 10-13, 1972, 6p. [ED 063 093]

Reading instruction aims at developing meaning and understanding; achievement of its goals depends on the continuous, consistent, and systematic evaluation of all aspects of a reading program. Since isolated skills have little value unless related to some pattern with built-in, designated levels of achievement, reading should be taught as a closely-knit system of experiences, principles, and processes. Both instruction and evaluation should be planned and constructed with care. Evaluative procedures used to measure reading progress must focus on all aspects of a balanced and sound program, and must be both reliable and valid. In its fullest sense, reading evaluation should (1) focus on new knowledge uncovered through basic and applied research studies, (2) provide opportunities for teachers to become fully involved in the evaluation process, and (3) determine if the breadth, depth, and scope is adequate for present and future reading needs. As individualized reading instruction demands complete records of reading growth, advances in technology can help lighten the work load of the teachers.

1313. Hoetker, James. Teaching and Learning Language: Who Should be Accountable? Illinois English Bulletin (January 1972): 19-24. [ED 060 002]

This study deals with the matter of who should be held accountable for students learning to read and write. It states that ways are needed to restructure schools so that teachers may reasonably be held responsible for seeing that all clinically normal students are able to read and write with at least minimal competence. It is believed that this restructuring of the present school system should result in small, locally controlled school districts, such that the teacher can know the students and be accessible to their parents.

These should be so administered that teachers are given the final responsibility for all professional decisions. Such a teacher-run school would be accountable to the students and their parents, and to its funding authority only for demonstrating that it is meeting the wishes of its clients and handling its funds in a legal manner. Prior to the reform of the present educational system, it is pointed out that everyone in a school is accountable for helping children learn to read and write.

1314. Impara, James C. A System of Educational Assessment in the State of Florida. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, April 1972, 8p. [ED 063 335]

A Florida program of assessment and accountability, wherein student achievement of specified minimum objectives is measured on a statewide level, is summarized. Background information, objective selection procedures, program management, and information utilization are discussed.

1315. Otto, Robert C. OBER: A Program for Objective Based Evaluation in Reading at the Newport-Mesa Unified School District. 21p. [ED 064 325]

OBER is the acronym coined by the Newport-Mesa Unified School District to describe its utilization of the System for Objective Based Evaluation-Reading (SOBE-R) developed by the Center for the Study of Evaluation at UCLA. OBER consists of three major components that are designed to facilitate the development and evaluation of the reading programs as defined at the district, school, or teacher level: (1) the Classification System: six broad reading categories which are subdivided into subcategories, subcategory divisions, and goals; (2) the Bank of Performance Objectives: consisting of over 800 specific reading objectives, stated in operational form, and keyed to the goals of the classification system; and (3) the Bank of Assessment Items, which will consist of sets of criterion-referenced evaluation items keyed to each of the performance objectives. The five major steps that have been completed in the OBER project are as follows: individual schools selected goals; district goals established from the schools' goals; schools selected performance objectives for each goal; and district composite of performance objectives established. There are five appendices: Statement of Educational Principles, Goal Selection Form, Performance Objective Tally, and an excerpt from the combined District Composite of Goals and Objectives.

1316. Otto, Wayne; Askov, Eunice. The Wisconsin Design for Reading Skill Development. Paper presented at the Annual Meeting of the International Reading Association, Atlantic City, N.J., April 19-23, 1971, 21p. [ED 051 966]

The Wisconsin design for reading skill development is a vehicle for implementing a skills-centered approach to reading instruction.

The components of the design are (1) management guidelines; (2) an essential skills list for six areas (word attack, comprehension, study skills, self-directed reading, interpretive reading, and creative reading) and behavioral objectives for each area; (3) instructional guidelines including a teacher's resource file; and (4) assessment measures which permit teachers to focus upon behaviors related to specific skills. Manuals are provided to assist with the implementation of the design. The design is supported by three kinds of empirical evidence: (1) reliability and validity investigations of the skills-related criterion-referenced tests (the individual tests were serving a purpose not met by the more formal group tests); (2) evidence that implementation of the design has a salutory effect on reading achievement (the comprehension and study skills phases of the design are yet to be implemented); and (3) data showing that teachers can realistically set and successfully pursue specific skill-attainment goals. Tables and references are included.

1317. Ray, H.W. The Office of Economic Opportunity Experiment in Educational Performance Contracting. Interim Report. Columbus, Ohio: Battelle Memorial Institute, Columbus Laboratories, 1972, 164p. [ED 061 645. Document not available from EDRS. Available from National Technical Information Service, Springfield, Va. 22151 (PB-206 793, MF $0.95, HC $3.00)]

This report summarizes the principal findings for the OEO experiment in performance contracting. The report emphasizes major results and conclusions to date. It is divided into (1) description of the experiment, in which the goal is outlined; (2) description of the technology company programs, curriculum and materials, and overviews of personnel and the incentive systems; (3) description of the target population, which provides variables of socioeconomic status; (4) criteria employed for the selection of achievement tests used and a description of those selected; (5) design and procedures used to administer selected tests and a summary of conditions for both pretesting and posttesting; (6) the data analysis method used for analyzing student achievement test data and the rationale for the analysis method employed; (7) results, conclusions, and associated qualifications concerning the impact of educational performance contracting on student achievement. Related documents are ED 060 546, ED 061 631, and ED 061 646.

1318. Report of Final Evaluation, ESEA Title I Projects, Fiscal Year 1971. Phoenix, Ariz.: Bureau of Indian Affairs (Dept. of Interior), 1971, 229p. [ED 056 795]

The report addresses itself to the Elementary and Secondary Education Act Title I projects operated via the Bureau of Indian Affairs in the Phoenix area during fiscal 1971. Projects are classified by components in the cognitive, psychomotor, and affective domains (e.g., reading, physical fitness, and dropout reduction). Within each component, project statistics are followed by a discussion of the evaluation results. Because the success of any program is based upon the correction of the problem areas encountered, the chapter containing the summary, conclusions, and recommendations is followed by a discussion of fiscal 1972, which presents specific modifications designed to improve new projects in the Phoenix area.

1319. Ruddell, Robert B., ed. Accountability and Reading Instruction: Critical Issues. Urbana, Ill.: National Council of Teachers of English, 1973, 51p. [ED 073 448. Also available from NCTE (Stock No. 00037, $1.50 nonmember, $1.35 member)]

The intent of the Commission on Reading of the National Council of Teachers of English in developing this group of articles was to provide insight into critical issues related to accountability and reading instruction. The initial presentation by James Laffey develops a brief historical analysis of educational accountability, and then discusses the alternatives and problems that must be understood in developing an accountability system. Richard Hodges identifies the nature and sources of behavioral objectives as he examines assumptions related to goals of instruction, measurement, and the content and methodology of learning. Kenneth Goodman's paper on testing concerns reading tests, design problems in constructing reading tests, and abuses of tests. Advantages as well as limitations and disadvantages of performance contracting are discussed by Mary Galvan. Galvan concludes her discussion by identifying needs and making recommendations useful in developing curriculum-oriented guidelines for schools interested in performance contracting. The concluding discussion by Harold Herber identifies a range of critical issues based on the preceding discussions.

1320. Sciara, Frank J. Criterion-Referenced Tests--A New Promise for Old Problems in Migrant Education. Paper presented at the Indiana Migrant Education Evaluation Conference, Anderson, Ind., January 22, 1972, 5p. [ED 057 984]

One of the big problems in migrant education is the need to determine quickly the educational level of the student so that his learning progress can continue as he moves from one school to another. Normative-referenced tests provide little help for the teacher. The author describes a new type of test (the criterion-references test), soon to be marketed commercially, which could aid the teacher in minimizing lost teaching time by easily identifying the appropriate instructional level in reading and mathematics for each student.

1321. Sigel, Efrem; Sobel, Myra. Accountability and the Controversial Role of the Performance Contractors. A Critical Look at the Performance Contracting Phenomenon. 1971, 137p. [ED 054 528. Document not available from EDRS. Available from Knowledge Industry Publications, Tiffany Towers, Box 429, White Plains, N.Y. 10602 ($95.00 first copy. Additional copies $45.00 subscriber discount)]

This report explores the evolutionary process of the concepts of accountability and performance contracting from their inception through mid 1970-71. Six major topics are discussed: (1) ideological, managerial, and pedagogical underpinnings, (2) definitions and history of the concepts, (3) five performance contracting projects, (4) the political implications of accountability, (5) the performance contracting industry, and (6) pitfalls and promises of the concepts. Appendices provide descriptions of various contracts and current profiles of contracting corporations.

1322. Skager, Rodney. The System for Objective-Based Evaluation-Reading. Los Angeles, Calif.: University of California, Center for the Study of Evaluation, 1971, 6p. [ED 058 315]

The System for Objective-Based Evaluation-Reading (SOBE-R) is discussed. Evaluative inadequacies of standardized tests are listed, and the function and components of the SOBE-R program are examined. Preliminary evaluations of SOBE-R are included, as are its expected accomplishments.

1323. Smith, Richard J. Evaluating the Teaching of Higher Level Comprehension Skills. Speech given at the Annual Meeting of the International Reading Association, Detroit, Mich., May 10-13, 1972, 6p. [ED 065 830]

One aspect of a balanced reading program is thinking activities that involve analytic, creative, critical and other higher level behaviors relative to reading selections. The following questions discussed in the paper are meant to be helpful as guidelines for principals in purchasing materials, supervising teachers, and evaluating the effects of the reading program in regards to thinking. (1) Is the content of the reading material well written and relevant to the student? (2) Are teachers asking questions that require higher-level thinking? (3) Are teachers providing the thinking time necessary for answering questions above the cognitive level of memory? (4) What kinds of activities are teachers involving students in relative to their reading? (5) Are teachers providing the experiential background necessary for gaining a full understanding of reading selections? (6) Are teachers giving prereading instruction that directs students to employ higher level comprehension skills? (7) Are teachers "readers"? (8) Are students reading self-selected materials? (9) Are students reading to satisfy their recreational and informational needs?

1324. Testing in Turmoil: A Conference on Problems and Issues in Educational Measurement. Paper presented at the Annual Meeting of the Educational Records Bureau, New York, October 29-30, 1970, 46p. [ED 054 202]

The 1970 educational conference sponsored by the Educational Records Bureau focused on the topic "Testing in Turmoil. A Conference on Problems and Issues in Educational Measurement." The International Reading Association and the National Council on Measurement in

Education cosponsored two conference sessions entitled "The Measurement of Reading: Procedures and Problems," and "Criterion-Referenced Measures: Pros and Cons," respectively.

1325. Woodbury, Charles A., Jr.; Jacobson, Milton D. Recommendations for the Evaluation of Performance Contracting: An a Posteriori View. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, April 1972, 4p. [ED 063 337]

Aspects of design and procedures used in the evaluation of a performance contract are discussed, and the project and findings are briefly summarized. The Virginia performance contract in reading was carried out in seven school districts. Evaluation of the project showed that although instructional changes that utilized desirable individualized approaches were used in the experimental program, the experimental group achieved neither less nor more than the control group on ordinary standardized test measures. However, the experimental group had more positive attitudes toward reading than did the control, and in addition mastered the majority of the instructional objectives prescribed. Eleven observations resulting from the evaluation, presented for the guidance of those who contemplate performance contracting, are presented.

Bilingual

1326. Bradley, Nola Ruth. A Study of the Relation of Oral Language Proficiency and Reading in a Group of Fourth-Grade Negro Children of a French Linguistic Background. M.A. Thesis, University of Texas, Austin, 1970, 95p. [ED 046 618]

The extent to which language differences might be responsible for the difficulties faced by Negro children in newly desegregated schools was investigated. The sample was a group of 46 fourth graders from one school in a Creole-speaking bilingual area of Louisiana. Goals of the study were (1) to determine the degree of correlation between the oral language proficiency test and reading achievement and verbal ability, (2) to determine the relation of these variables with success in school, and (3) to test the efficacy of the oral language proficiency test with a new population, since it was relatively new and had not been widely tested. Results of this study were compared with a previous study with fourth-graders in San Antonio, Texas. Conclusions were that significant correlations do exist between oral language proficiency and reading and verbal abilities, and that the oral language proficiency test is a valid instrument for investigations of this sort. Tables and a bibliography are included.

1327. Oller, John W., Jr. Assessing Competence in ESL: Reading. Revised version of a speech presented at the Annual TESOL Convention, Washington, D.C., March 1, 1972, 25p. [ED 060 757]

Results from research with eye movement photography (EMP) are discussed with a view to defining differences between native-speaker and non-native reading processes. The greatest contrast is in terms of the duration of eye fixations; non-native speakers at the college level require about as much time for a fixation as an average native-speaker at the third-grade level. Various tests of reading skill are discussed and correlations with other tests are given. The hypothesis is advanced that high correlations between tests of listening, speaking, reading, and writing are an indication of test validity. Support for tests which can easily be constructed by classroom teachers is provided.

1328. Upshur, John A. A Search for New Reading Tests. Speech presented at the Annual TESOL Convention, Washington, D.C., March 1, 1972, 12p. [ED 061 805]

In contemporary reading comprehension tests, abilities which may have little to do with reading ability can have a great effect on test scores. Reading tests are not constructed so that they maximize abilities unique to reading. On the other hand, tests on other language skills do not minimize what is unique to reading. Comprehension is the process of getting the message, and a reading comprehension test should give information about that stage of the information processing sequence. The cloze technique, photography of eye movement, and miscue analysis can all be used to measure a smaller range of information-processing tasks than do the contemporary reading comprehension tests.

Language Skills

1329. Baker, Georgia Ann Pitcher. The Efficiency of Diagnostic, Readiness, and Achievement Instruments as Predictors of Language Arts Achievement: A Longitudinal Study from Kindergarten through Second Grade. Ph.D. Dissertation, Purdue University, 1969, 134p. [ED 046 944. Document not available from EDRS. Available from University Microfilms (Order No. 70-3845)]

The broad purpose of this study was to investigate some ways of predicting the language arts achievement of kindergarten children in order that their academic needs more nearly be met. The Metropolitan Readiness Test (given to sixteen subjects at the end of kindergarten) and the Metropolitan Achievement Test, Primary I, the Purdue Perceptual Motor Survey, the Illinois Test of Psycholinguistic Abilities, and the screening tests for identifying specific language disability (given at the end of first grade) were identified as predictor sets. The achievement criteria were summated subtest scores from the Metropolitan Achievement Test, Primary II, and the California Achievement Test, lower primary, given at the end of the second grade. From the data available, it was concluded that (1) the Metropolitan Readiness Test does not prove to be an efficient predictor of language arts achievement for the second grade subjects; (2) the diagnostic instruments are statistically as efficient as or more efficient than the readiness and achievement tests with most of the criteria; and (3) individual patterns of academic development may be observed by plotting performances on some of the predictive criteria. The information gained from the diagnostic instruments may be useful to the teacher for formulating educational objectives to meet individual need.

1330. Bateman, Barbara. The Illinois Test of Psycholinguistic Abilities in Current Research Summaries of Studies. Urbana, Ill.: University of Illinois, Institute of Research for Exceptional Children, 1965, 49p. [ED 011 417]

Research generated by the experimental edition of the Illinois Test of Psycholinguistic Abilities is reviewed. Twenty-five statistical, remedial, and language disorder studies are summarized according to purpose, subjects, procedure, results, and comments. Seven additional studies are included in an annotated bibliography. Fifty-four other references are also included.

1331. Bateman, Barbara D. Interpretation of the 1961 Illinois Test of Psycholinguistic Abilities. 1968, 108p. [ED 026 771. Document not available from EDRS. Available from Special Child Publications, Seattle, Wash. ($3.00)]

The Illinois Test of Psycholinguistic Abilities (ITPA) is treated in terms of the ability measured, hints for administration and scoring, and questions often asked for each of the nine subtests. Typical profiles are described and analyzed for mentally retarded, kindergarteners, slow learners, culturally disadvantaged, Negroes, good and poor readers, articulation defective, aphasic and aurally handicapped, visually handicapped, cerebral palsied, and gifted. The ITPA and reading are discussed with profiles, and tentative generalizations are made. Patterns of deficiencies in profiles are interpreted for visual problems, the Strauss Syndrome, shyness, encoding disability, and an effeminate mentally retarded male. Auditory vocal channel disabilities are discussed in detail with graphs. The reliability of clinical judgment is treated and considerations for comparing and contrasting profiles with different subtest scores are given. A 122-item bibliography and a total of 43 profiles are included.

1332. Calfee, Robert C.; Venezky, Richard L. Component Skills in Beginning Reading. Madison, Wis.: University of Wisconsin, Research and Development Center for Cognitive Learning, 1968, 19p. [ED 064 655]

Reading research in which different methods or materials have been compared has proven inconclusive. This paper is restricted to beginning reading, defined as the acquisition of letter-sound decoding ability, and asks what skills are required by current tests. Available reading readiness and achievement tests consist of batteries of subtests, each of which is designed to measure a component skill necessary in reading. However, high intercorrelations between the subtests indicate either that separable skills are not being measured, or that skills develop at the same rate in most children. However, the makeup of the items in the tests is such that ability to follow instructions and general language competence are common factors which enter significantly into performance on all subtests. The experience of psychologists in constructing tests to identify separable skills in language and intelligence indicates that this task is possible but difficult. Current tests are suitable for prediction of reading performance, but tests that evaluate separable skills are urgently needed for further research on the development of the reading process, as well as diagnosis. Examples are presented for articulation and phonetic discrimination. This study was sponsored by USOE.

1333. Goldring, Susan L. The Effect of Presentation and Test Mode on Short Term Retention of Words. Madison, Wis.: University of Wisconsin, Research and Development Center for Cognitive Learning, 1969, 24p. [ED 064 656]

The experiment employed Sternberg's procedure to investigate the effects of presentation and test modalities (auditory or visual), and number of presentations on the processing rate of monosyllabic words of varying graphemic and phonemic length. Twenty college students and twenty sixth-graders served as S's. Each S received all conditions and lists in a 10 x 10 Graeco-Latin square design. The main results were that (1) short high frequency words were processes at approximately the same rate as single digits; (2) all combinations of presentation and test yielded approximately the same processing rate, except for visual-auditory combination, which was much slower; (3) there was no difference due to the age of the S's; and (4) number of presentations and word length had no consistent effects. This study was sponsored by USOE.

1334. Johnson, Dale; Venezky, Richard. An Instrument for Testing Pronunciations of Vowel Clusters. Part I: Linguistic Background. Madison, Wis.: University of Wisconsin, Research and Development Center for Cognitive Learning, 1970, 34p. [ED 046 626]

Since vowel clusters are among the most unpredictable letter-sound correspondences in English, children learning to read must often rely on something other than spelling as a clue to pronunciation of vowel cluster words. Data relating to pronunciation frequencies of certain vowel clusters were gathered for this study, and a rationale for selection of words containing these clusters was developed. An instrument devised for use in assessing children's initial pronunciations of vowel clusters in unfamiliar words is described, and a study using it is proposed. Results of the study sponsored by the USOE will be presented in a second report.

1335. Mason, George E.; Blanton, William E. Semantic Constructs and Beginning Reading. Paper presented at the Annual Meeting of the National Reading Conference, Atlanta, December 4-6, 1969, 16p. [ED 037 311. Document not available from EDRS. Available in

Nineteenth Yearbook of the National Reading Conference, Inc., from Marquette University]

This study was designed to determine (1) the relevance of a child's "language map"--his expressed attitude toward reading as developed by early experiences with reading material and oral reading--to his potential reading achievement, and (2) the accuracy of a previously developed instrument for measuring the "language map" and thus the semantic constructs of young children. The Individual Reading Interest Survey (IRIS) was given to 52 rural, disadvantaged children who were beginning the first grade in Florida and to a stratified sample of 143 three-, four-, and five-year-old children in a University of Georgia project. The 42 IRIS questions were constructed to reveal the child's knowledge of and interest in reading. The Metropolitan Achievement Test (MAT) and the Metropolitan Readiness Test (MRT) were given to the six-year-olds and the Wide Range Achievement Test to the younger children. Although the MAT and MRT scores were most closely correlated, there was a significant correlation between the IRIS and other tests for five- and six-year-olds. Preliminary generalizations also concluded that the measure of children's "language maps" was reliable. Tables and references are included.

1336. Prator, Clifford H. Development of a Manipulation-Communication Scale. 1969, 3p. [ED 041 258]

Teachers have been increasingly worried for more than a decade about the effectiveness of English as a Second Language instruction in the United States at the intermediate and advanced levels. This article investigates briefly the causes of this situation and suggests a theoretical guideline--a scale of manipulation and communication teaching techniques which would allow for a gradual and orderly transition from activities that emphasize the development of basic linguistic skills to activities designed to encourage the free communication of thought. Communicative classroom activities are defined as those that allow the student to find the words and structures he uses. Manipulative activities are those in which the student receives the words and structures from teacher, tape, or book. The movement from manipulation to communication does not have to be abrupt and probably the shift should never be total, even in the most advanced classes. One result of the application of the scale, which would make use of Gurrey's classification of questions, might be a blurring of the sharp line separating language courses from literature courses.

1337. Roberts, Elsa. An Evaluation of Standardized Tests as Tools for the Measurement of Language Development. 1970, 17p. [ED 043 657]

Four tests--the Illinois Test of Psycholinguistic Abilities, the Metropolitan Readiness Tests, the Peabody Picture Vocabulary Test, and the Wechsler Preschool and Primary Intelligence Scale--commonly used to measure language development in young children are evaluated by four criteria: (1) what development aspects do they claim to tap; (2) what do they actually tap; (3) what linguistic knowledge is presupposed; and (4) what special problems face a nonstandard English speaker. These tests are considered inappropriate because they fail to control question structure, to consider structures and operations the children may not have acquired, to account for dialectical differences, and to test adequately specific aspects of language acquisition. They do, however, measure the assimilation of a particular set of sementic associations and cultural values, and of a particular verbal style. It is suggested that linguistic factors be considered in all tests for young children. More research is necessary on the types of structures and operations acquired by age five and on the nature of cross-dialectal comprehension. Until the results of such research are available, scores on standardized tests must be used and interpreted very carefully.

1338. Robinson, Peter. Oral Expression Tests. Based on a paper presented at the Canadian Linguistics Association Congress, Toronto, June 10-13, 1969, 17p. [ED 037 710]

The discussion centers around the amount and kind of participation that should be asked of a student taking reading and oral comprehension tests. For each test there are four levels of participation; zero, limited, extended, and complete. The test designer should create a situation which will encourage the subject to give maximum expression, because his language in the test is a representative sample of what he can produce in a real situation. This also enables the corrector to give a more accurate evaluation of the student's language ability. The most effective oral test includes an interview and a discussion section to permit the most extensive use of the language. Various ways of evaluating linguistic structures are suggested, with emphasis on organization of test goals.

1339. Rudolph, William B. Measuring Reading Comprehensibility and Difficulty in Mathematical English Using Relative Sequential Constraint. Paper presented at the Annual Meeting of the American Educational Research Association, New York, February 4-7, 1971, 21p. [ED 052 898]

Literature in the area of measurement of comprehensibility is reviewed as it relates to the utilization of mathematical models for English. A number of mathematical language models are presented and explained, and evidence of their usefulness is given where available. In nonmathematical research, studies concerned with measurement of letter redundancy and other textual constraints are considered as they relate to reading comprehension. Finally, relationships between redundancy and learning are discussed. It is suggested that studies be undertaken to further examine relationships between reading comprehension and mathematical English. References and a glossary are included.

1340. Technical Reports: Evaluation Reports, ESEA Title I, 1970-1971. Los Angeles: Los Angeles Unified School District, 1971, 256p. [ED 062 459]

The activities evaluated in this report were in progress during school year 1970-71, the second of a three-year cycle for ESEA Title I programs in Los Angeles City Schools. The components consisted of instruction (reading, language, and arithmetic), auxiliary services, intergroup relations, parent involvement, and staff development. The performances of both public and nonpublic school pupils were measured, with all pupils meeting or exceeding the Title I objective in reading, and, with the exception of grade 7, all exceeding the objective in arithmetic. Uncertainties of District reorganization affected some auxiliary services, but counseling, pupil services and attendance, and health services continued for all elementary schools in the program, and for Student Achievement Center students in the secondary schools. Parent involvement and activities in intergroup relations and staff development had their supportive effects throughout the grades. Appendices contain lists of standardized tests and nonstandardized instruments, as well as a glossary of terminology and personnel titles used in this study.

1341. Youtz, Adella C.; Putnam, Lillian R. Multi-Variable Comparison of Structural Reading Program and an Enriched Basal Reading Program with Disadvantaged Urban Children. Final Report. Union, N.J.: Newark State College, 1968, 82p. [ED 024 542]

This exploratory multivariable comparison of an augmented structural (Stern and Gould) and an enriched basal (Winston) program was conducted with two matched classes of low to average ability disadvantaged children in grades 1 and 2. At the end of grade 1, the basal class rated significantly superior on the Gates-MacGinitie Comprehension Test and the California Test of Mental Maturity. The structural class rated significantly superior on the Structural Reading Achievement Test, and in the number of words written on the writing sample. At the end of grade 2, significant differences favored the structural class in spelling ability, and in the desire to write words and stories instead of to color pictures. Analysis of covariance, with mental ability controlled, showed the structural class to be equal or superior on most measures of the study. Consistent findings favoring the structural class in reading and writing samples were confirmed by a study of the progress of the lowest five readers in each class. The researchers inferred that the growth of the structural class in language components and their favorable academic work habits suggested that the structural method provided a stronger foundation in language skills for these disadvantaged children. References and appendixes are included.

Learning Disabilities (Exceptional Children)

1342. Abbott, Betty, comp. Scales and Tests for Evaluating Children with Learning Disorders. Springfield, Ill.: McFarland Mental Health Zone Center, 1970, 8p. [ED 060 579]

Scales and tests for evaluating children with learning disorders are listed by type of test and by characteristics investigated. Types of tests listed are individual intelligence tests, developmental charts, readiness tests, and language evaluation instruments. Tests are also included for investigating visual motor development and functioning, auditory-verbal development and functioning, and reading and spelling. Sixty-six items comprise the list, and addresses of test publishers are given. This study was sponsored by the Illinois State Office of the Superintendent of Public Instruction, Springfield.

1343. Buktenica, Norman A. An Early Screening and Task-Learner Characteristic Model of Prevention. From the symposium "Psycho-Educational Diagnosis of Children with Learning Disorders," presented at the Annual Meeting of the American Psychological Association, Miami, September 1970, 14p. [ED 044 436]

There is need for early group assessment aimed at prevention of learning disorders, specifically reading disorders. An estimated 15 percent of elementary and secondary school students are reported to be handicapped in the area of reading. Early screening and matching of the learning ability of children with instructional programs holds promise to diminish school learning problems. From the beginning of formalized schooling, efforts have been made to analyze the task to reading. This task analysis has led from a visual or auditory approach to a meaning and code-breaking approach. Most recently a model of perceptual characteristic model is an attempt to generate a best-fit blend in instruction; that is, the learner and his characteristics are blended in the most appropriate way with the task that he is to learn. Copies of the models developed are appended.

1344. Evaluation Plan. Minneapolis: Minneapolis Public Schools, 1971, 165p. [ED 060 028. Document not available from EDRS. Available from Minneapolis Public Schools, Special Education Division, Regional Prescriptive Instruction Center, Minneapolis, Minn. 55406]

The services of the Regional Prescriptive Instruction Center (PIC) are evaluated using varied approaches. Student performance measures will be obtained in the areas of reading, spelling, and mathematic skills, as well as behavior ratings in terms of classroom adjustments. These measures will be administered in a pre-post test fashion with a sixty school day interval operating. Teacher evaluation will be accomplished by PIC staff rating teachers on the extent to which they have implemented the individual prescriptive plan, and, also, teacher ratings of PIC services through questionnaires. Teachers receiving PIC inservice training will be asked to complete a familiarity-of-terms checklist both pre and post. Parent evaluation will be monitored by the use of a parent evaluation questionnaire. Various supporting objectives will also be evaluated through the use of cost-effectiveness analyses, description of psychoeducational characteristics of children receiving PIC services, and those characteristics which best predict academic improvement following PIC services. Other objectives addressed by the evaluation procedures are those assessing value to teachers of PIC criterion--referenced test data and PIC diagnostic-remedial reports and recommendations. See ED 060 029, 060 030, 060 031, 060 032, 060 033, and 060 034 for tests and evaluative instruments used in the program, and ED 060 066 teacher referral information and statistical information forms.

1345. Hagin, Rosa A.; and others. Clinical-Diagnostic Use of the WPPSI in Predicting Learning Disabilities in Grade One. New York: New York University Medical Center, 1970, 26p. [ED 046 999]

The Wechsler Preschool Primary Scale of Intelligence; (WPPSI) was used in a Manhattan, N.Y., public school because administrators, teachers, and parents had asked for help in understanding children who had difficulty in learning to read well, despite special efforts to help them. A preventive intervention program was begun based on a clinical study of every first grader. Forty children were predicted to make normal progress; thirty, a "high risk" group, gave evidence on neurological and perceptual examinations that they might have learning problems; and twelve children were omitted. High risk cases were those with a discrepancy between expectancy and achievement. Comparisons were made of the total groups of high risk and normal progress children, of samples matched for IQ and sex, and of subgroups based upon diagnosis within the intervention (high risk) group. Despite the small diagnostic subgroups, some tentative conclusions can be drawn: (1) the WPPSI produced rich clinical material best understood in conjunction with the diagnostic subgroups; (2) the quantitative and qualitative WPPSI material helps in the selection and diagnostic processes and in planning intervention; and (3) it is inadvisable to assume that learning disability is a homogeneous condition manifesting itself in a characteristic cognitive pattern in first grade. WPPSI profiles for some typical cases and for the diagnostic subgroups are included.

1346. Lombard, Avima; Stern, Carolyn. An Instrument to Measure Visual Discrimination of Young Children. Los Angeles: University of California, 1967, 23p. [ED 015 510]

An instrument for measuring visual discrimination ability without confounding variables of motor skills has been constructed. To avoid the eye-hand coordination usually required on these tests, a selection, rather than a drawing, response was developed. This test, the University of California at Los Angeles Discrimination Inventory (VDI), consists of 52 items on four subtests--figure ground, form constancy, closure, and position in space. Each of these has been assumed to represent prerequisite skills important in learning to read. Children three, four, and five years old were tested on the VDI and two measures of mental ability. Results indicate that significant differences are attributable only to age and race. Correlations between the VDI and intelligence measures are weak. Although reliability, face validity, and construct validity have been established, a study is now being planned to measure predictive validity. Additional work is also being done in developing the four subtests as measures of component elements of a broad visual discrimination ability. It is expected that the final VDI will be used with children from a wide range of socioeconomic backgrounds, and will identify those children with a variety of learning disorders, particularly dyslexia, before they become severe enough to alert classroom teachers.

1347. Murray, Beulah B. A Suggested Method for Pre-School Identification of Reading Disability. Knoxville, Tenn.: University of Tennessee Psychological Clinic, 1966, 40p. [ED 025 055]

Over 200 children were tested to determine whether, of prospective first-grade pupils, the 25 percent scoring lowest on tests of visual-motor-perceptual development would also be clustered in the lowest third of first-grade performance on word recognition skills at the end of the year. Tests given upon entrance were the Peabody Picture Vocabulary Test, the Walking Board Motor Ability Test, the Winter Haven Form Copying, Visuals I, and Ocular Motility. Tests given in May were the Winter Haven, Visuals III, the Gates Primary Word Recognition, and California Low Primary Reading Test and Letter Matching Form. (Tests were also administered in March.) The Winter Haven was the best predictor of reading achievement with a correlation of .45 with composite reading scores, and 32 (67 percent) of the bottom 48 scorers on the Winter Haven were among the lowest 65 scorers on reading on the Gates test. To evaluate modifiability of perceptual skills and their relation to reading abilities, fourteen children who scored poorly on the pretests were assigned to two treatment groups. One group received daily twenty-minute visual-motor-perceptual training, and the other group did not. The groups were combined for reading instruction for five weeks in the spring. Learning improvement from March to May because of visual-motor-perceptual training was significant at the .05 level.

1348. Satz, Paul; Friel, Janette. Some Predictive Antecedents of Specific Learning Disability: A Preliminary One-Year Follow-Up. Gainesville, Fla.: University of Florida Neuropsychology Lab, 1972, 32p. [ED 060 596]

Based on a conceptualization of specific learning disability within a developmental rather than disease model, the longitudinal research project attempted to assess early indices of later reading disability. Kindergarten boys (N equals 474) were tested at the beginning of the school year on a number of developmental and neuro-psychological tests (predictors). At the end of the year, preliminary followup consisted of classification of the students by their teachers into high-risk and low-risk criterion groups for potential learning disability (the true criterion would be third-grade reading achievement scores). Purpose of the classification by teachers was to obtain preliminary criterion estimates of subsequent learning disability in order to determine the predictive validity of the independent variables (the tests administered earlier). Results showed high concordance between predictor measures (tests) and teacher classifications. Tests correctly classified 78.4

percent of the children classified as high risk, and 82.7 percent of the low-risk children, suggesting that correct identification can occur even before formal reading instruction. Highest determining variables were finger localization test, socioeconomic status, dichotic listening total recall, and Peabody Picture Vocabulary Test.

1349. Schiffman, Gilbert B. Multi-Disciplinary Diagnosis. In Speaking to the Issues: Position Papers in Reading. College Park, Md.: University of Maryland, College of Education, 1967, 20p. [ED 038 260. Document not available from EDRS]

The diagnosis of severly retarded pupils as an interdisciplinary concern is discussed. Descriptions of the severe reading disability syndrome given by various disciplines are presented under the following headings: neurological factors--minimal brain damage, lateral dominance; physical factors--endocrine and metabolic disorders, optical and ocular defects, audition; intellectual factors; and pedagogical factors. The minimum recommended diagnostic team includes an educator, a psychologist, a language consultant, a visiting teacher or social worker, and a pediatrician. Services of the following special consultants are also recommended: Neurologist, opthalmologist and optometrist, audiologist, psychiatrist, and physical education specialist. Four short reactions to the paper are included.

1350. Teacher Manual in Visual-Motor-Perceptual Training. Suffern, N.Y.: Ramapo Central School District 1, 1970, 49p. [ED 050 904]

The experimental program in visual-motor-perceptual training in Ramapo Central School District No. 1, Suffern, New York, was used as a guideline to prepare a detailed description of specific activities and exercises to be used by administrators and teachers. In the program, 80 visual-motor-perceptual handicapped children in first, second, and third grades were identified by a gross screening instrument and a fine screening instrument. They were then randomly placed into experimental and control groups. Pretesting consisted of the Lorge-Thorndike IQ Test, the Metropolitan Readiness Test, the Gates-MacGinitie Reading Test, and the Stanford Achievement Test. The children were put into groups to receive training according to individual needs for one-half hour daily. Training activities were divided into six major categories: ocular motor, movement, laterality and directionality, spatial judgments, eye-hand coordination, and visualization. On the basis of fine screening results six months later, the experimental group showed more improvement in visual-motor-perceptual functioning than the control group. The manual suggests specific activities and exercises for teacher use in different settings (regular classroom, physical education, and remedial training). A list of useful equipment and materials and a bibliography are included.

1351. Alba, Enrique. A Time-Based Methodology for Assessment of Individual Performance. Paper presented at the meeting of the American Educational Research Association, Chicago, April 1972, 71p. [ED 064 409]

Education should be geared to the individual student; yet implementation of individualized programs has been slow. A set step in the area of individualized instruction should be the development of an appropriate methodology for recording and analyzing a student's performance. This paper is an attempt to provide the recording procedures which will aid in achieving such a measure. Under the proposed methodology, a precise measure of a student's performance is obtained by isolating the three components in a performance movement: response emitted by the student, the question, and the interval between the termination of the question and the initiation of the response. Five college psychology students were used in the experiment. A control reader presented the reading material to the subjects. The reader controls the speed at which the reading is presented to the subject. Subjects were told to read aloud, and answer questions that would be presented to them via flash cards immediately after reading the selection for that session. A cumulative record of the performance of the subjects is presented. Changes in the duration of the components show a definite pattern of variation. On the stimulus duration component there is consistently a reduction in duration from the first to the second session. The number of correct responses increase for all subjects on the second session. The results of the experiment indicate that the recording model advocated has the necessary precision to reflect the most minute changes due to experimental manipulations.

1352. Biesbrock, Edieann Freeman. The Development and Use of a Standardized Instrument for Measuring Composition Ability in Young Children (Grades Two and Three). Ed.D. Dissertation, University of Georgia, 1968, 183p. [ED 040 185. Document not available from EDRS. Available from University Microfilms (Order No. 69-9471)]

This project developed a standardized instrument of the product-scale class to measure the global quality of student compositions on a seven-point scale. Compositions produced under standardized conditions were compared to a series of reliable models chosen from samples of children's writing. The developed instrument was used to evaluate growth in composition ability; to examine possible relationships between growth and sex; and to compare global quality ratings with several syntatic measures, mental maturity scores- reading scores, chronological age, sex, and grade level. Reliability coefficients indicated that the test instrument was effective at the second- and third-grade levels. The growth rate measured in over 2000 students (grades two to four) indicated a steady increase in global essay quality, but the rate of growth was not related to sex. Reading scores and certain measures of syntatic maturity correlated highly with essay ratings of global quality. Mental maturity and chronological age did not reveal high correlation with the essay ratings. The combined mean essay rating of second- and third-grade girls was significantly higher than that of second- and third-grade boys, indicating that sex may be an important factor influencing test performance.

1353. Cloward, Robert D.; Cohen, S. Alan. Basic Test of Reading Comprehension. Mobilization for Youth, 214 East Second Street, New York, N.Y. 10009, 1965, 13p. [ED 001 544]

The test was designed to assess speed of reading comprehension. It consisted of numbered passages, one to three sentences in length, arranged in paragraph form to simulate the normal reading exercise. Toward the end of each passage, a word was inserted which spoiled the meaning of the passage. An example of the test follows: (1) In the summer we play in the snow, (2) The dog bit Jane on the leg. The bite made Jane very happy, (3) Pat has a fast car. Every day he takes his slow car to school. A teachers' guide and an answer sheet are included.

1354. Cooke, Dean Albutt. An Analysis of Reading Comprehension Questions in in Basal Reading Series According to the Basal Reading Series According to the Barrett Taxonomy. Ph.D. Dissertation, Cornell University, 1970, 125p. [ED 064 672. Document not available from EDRS. Available from University Microfilms (Order No. 71-12, 124)]

Reading comprehension questions selected from readers, teacher manuals, and workbooks of three current, widely-used and representative basal reading series were analyzed according to the Barrett Taxonomy to determine cognitive objectives. The taxonomy has five major divisions and 33 levels within, claimed to be cumulative and sequenced according to difficulty of thinking tasks. Of the 3,636 questions analyzed from all of the material and classified in major divisions, 55 percent were literal comprehension, about 26 percent were inferential comprehension, 10 percent were appreciation, about 6 percent were reorganization, and about 3 percent were evaluation. The testing of hypotheses established that literal comprehension questions predominated for almost all materials and grade levels, statistically significant differences existed among series, and there was a tendency for question difficulty to increase with grade level. Evidence supported the conclusion that performance of a higher level cognitive task must implement all preceding lower level tasks; therefore, the proportion of literal comprehension questions could be reduced.

1355. Farr, Robert. Reading Tests and Teachers. Paper presented at the Annual Meeting of the International Reading Association, Boston, April 24-27, 1968, 9p. [ED 020 082]

Tests should be carefully examined if teaching objectives are to match test objectives. Teachers should become more proficient in the broader aspects of evaluating reading performance, and should employ a wider variety of evaluation techniques. The use of standardized reading tests as indicators of instructional reading level should be abandoned. Publishers should be forced by test users to discover that it is unprofitable to publish a test that does not meet the American Psychological

Association's minimum standards. Subtest scores of standardized reading tests should be interpreted with considerable caution. Eight references are given.

1356. Glock, Marvin D. How the Classroom Teacher Can Use a Knowledge of Tests and Measurements. Paper presented at the Annual Meeting of the International Reading Association, Anaheim, Calif., May 6-9, 1970, 15p. [ED 040 832]

Three basic concerns in measurement were selected, and their importance for the classroom teacher was illustrated. These were test validity, reliability, and problems in measuring achievement gains. Test validity was dependent upon content, type and quality of the questions, adequacy with which the test sampled reading skills, and the care with which the test was administered. Consistency in test reliability was dependent upon the number of samples of a pupil's performance on a task and upon accurate scoring. Measuring gains in pupil achievement was dependent upon correct interpretation and treatment of scores, taking the regression effect and error factor into consideration. References are included.

1357. Griffin, Margaret; and others. Guide to Clinical Evaluation Instruments in Reading. ERIC/CRIER Reading Review Series. Bloomington, Ind.: Indiana University, ERIC Clearinghouse on Reading, 1972, 235p. [ED 066 714]

The purpose of this reference guide, sponsored by the USOE, is to enable test consumers to identify published measures which may meet their particular needs. The basic features include: notations of whether norm data are reported in the test manual; indexes to Buro's Mental Measurement Yearbooks, or Reading Tests and Reviews, for evaluation; complete publishers' addresses and test descriptions; and bibliographical references from nine ERIC/Reading Basic References and the Summaries of Investigations Relating to Reading, published in the Reading Research Quarterly in 1960, 1970, and 1971. The guide contains predominantly those measures which were reported in titles and abstracts of articles pertaining to reading included in the published journal literature in reading.

1358. Guszak, Frank J. Strategies of Measuring Students' Understanding of Written Materials. Paper presented at the Annual Meeting of the International Reading Association, Anaheim, Calif., May 6-9, 1970, 11p. [ED 040 833]

The measurement of a pupil's comprehension development from literal comprehension to evaluation focused on two questions: (1) How do we measure the various types of comprehension? (2) How should we measure the various types of comprehension? Literal comprehension is presently measured by the recall or memory-type question. However, one should assess the reading matter, know the content and background of the discussant, and form interrelationships accordingly. The next level of comprehension, reorganization, has been overlooked but should be measured using the silent strategies of sequence, synopsis, or summary tasks. Inferential comprehension is measured by making predictions and trying to verify them. However, greater emphasis should be placed on a directed-reading-thinking activity in which predictions and verifications lead to further thinking. The highest level of comprehension, evaluation, is primarily measured by asking the student for a judgment without a logical justification for it. This latter point should be stressed. References are included.

1359. Ingersoll, Gary M. Individual Difference Research and Learning by Reading. Paper presented at the meeting of the American Educational Research Association, Chicago, April 1972, 14p. [ED 061 020]

Research literature regarding the Aptitude Treatment Interaction (ATI) model of research is reviewed, and arguments for and against the use of the model are described. The purpose of the model is to allow a combination of desired properties of experimental and correlational methods. It yields disordinal interactions when experimental situations are carefully planned, but may yield ordinal interactions when they are not. Situations in which the model might prove valuable are outlined, and recommendations are made for using the model in reading research. It is emphasized that (1) close attention must be paid to defining experimental manipulations, (2) familiarity with instructional and aptitudinal variables is necessary, and (3) careful analysis of theoretical models of learning before application of the model to a research situation should avoid negative results. Reading research studies in which the ATI model was used are described, and figures and references are included.

1360. Invitational Conference on Testing Problems. Proceedings (New York City, November 2, 1968). Princeton, N.J.: Educational Testing Service, 141p. [ED 033 998. Document not available from EDRS. Available from the publisher]

Papers presented at this conference discussed the educational evaluation and the problems of the socially disadvantaged. Topics were "The Comparative Field Experiment: An Illustration from High School Biology," by Richard C. Anderson; "Evaluation of Teacher Training in a Title III Center," by Ethna R. Reid; "Evaluating a National Program: The Training of Teachers of Teachers," by Bertram B. Masia and P. David Marland, Jr.; "Nonschool Variables in the Education of Disadvantaged Children," by Edmund W. Gordon; and "Issues and Strategies in Employment of the Disadvantaged," by Alfred P. Maslow. See ED 028 471 for the 1967 proceedings of this conference.

1361. Kiser, George Edward. A Study of Selected Indicators of Children's Interest-in-Reading. Ph.D. Dissertation, University of Kentucky, 1968, 82p. [ED 041 906. Document not available from EDRS. Available from University Microfilms (Order No. 69-17, 528)]

This study evaluated the effectiveness of four selected indicators for measuring interest-in-reading--the San Diego County inventory of reading attitude, standardized verbal achievement test scores, peer ratings, and teacher ratings. The design of the study involved creating low, average, and high interest-in-reading groups, by sex, at each of three elementary grade levels (a total of eighteen groups) on the basis of actual amounts of reading done by the subjects. Scores of each of the indicators were collected on each group, and analyzed to determine which of the indicators effectively differentiated between interest-in-reading groups. Analysis of interest-in-reading groups means was used to determine whether they changed in predicted directions. Findings showed that (1) scores from three of the indicators were higher for girls than for boys; (2) boys scored higher than girls on the standardized verbal achievement test; and (3) the San Diego County inventory was more effective for boys than girls, and more effective for boys in grades 3-6. However, since grade levels and sex operate to destroy the overall validity of most indicators, effective ways to measure interest-in-reading should be found to aid in improving reading instruction.

1362. McDill, Edward L.; and others. Strategies for Success in Compensatory Education: An Appraisal of Evaluation Research. Baltimore, Md.: Johns Hopkins Press, 1969, 83p. [ED 037 505. Document not available from EDRS. Available from the publisher--$1.95]

This study addresses itself to the quality of evaluation research on compensatory education programs, the knowledge based on such evaluations as to the effectiveness of compensatory education, and the implications of the data that need to be examined for future planning of such programs and for designing studies to test their effectiveness. Research findings on Head Start, Elementary and Secondary Education Act (ESEA) Title I, and Upward Bound programs, along with eleven locally funded programs are described and reviewed. Most notable, reportedly, of the locally funded programs are the Bereiter-Englemann Academic Program (1964, Champaign, Illinois); and the Peabody College Early Training Project (1959, Nashville, Tennessee), which are also described in detail. Recommendations for fund allocations favor the support of programs with careful evaluative techniques built in (or "control programs"), and a small number of speculative and high-risk programs which could proceed without excessive review and with slow evaluation; the pressing need for effective compensatory education is cited as justifying novel experiments programs. Also recommended is the treatment of the large majority of programs as falling into a category of compromise in regard to program specificity.

1363. Norton, Daniel P.; Faunce, Richard W. Sibling Methodology in Evaluative Research. Paper presented at the meeting of the American Educational Research Association, Chicago, April 1972, 3p. [ED 065 585]

Evaluation of the Pyramid Reading Program, Title I, ESEA, of the Minneapolis Public Schools was carried out using sibling methodology. The reading readiness at entry of kindergarten students was compared with that of their older siblings at their time of first grade entry, and fourth-grade reading achievements will also be compared. The first phase of data collection led to the identification of 343 first graders of 1970 whose older siblings had also been tested with the Metropolitan Readiness Test at first grade entry. The 1970 examinees were classified by sex and by exposure to program materials alone, or to both materials and teachers. Two analyses were performed on the data. Results showed a significant difference in favor of target pupils over their older siblings. Neither sex nor program exposure was significant.

1364. Rankin, Earl F., Jr.; Tracy, Robert J. Methods of Computing and Evaluatting Residual Gain Scores in the Reading Program. Journal of Reading 10(March, 1967). [ED 013 742. Document not available from EDRS]

The "residual gain" statistic developed by Manning and Dubois is presented as a tool for the measurement of individual differences in improvement resulting from training. Rankin and Tracy utilized residual gain measures in evaluating reading progress, and noted their potential as a research tool in studying correlates of reading improvement. In comparing residual gains with crude gain (the simple difference between pre- and post-training measures), a discrepancy in grades assigned for improvement in almost half the cases was found. Crude gains tended to underestimate the progress of superior improvers (as measured by residual gain), and to overestimate the progress of inferior improvers. Two computational formulas of primary interest to the researcher, the Z-score and the raw score methods, are presented with descriptions of their advantages and disadvantages. A computational method for evaluating residual gains in terms of derived scores based on the normal distribution curve is described. A short graphical method for assigning evaluation categories to residual gains in the classroom is presented. The methods for estimating and evaluating residual gains without laborious calculation should make the technique available to reading teachers with an elementary knowledge of statistics. Three references are included.

1365. Reading K-3. Instructional Objectives Exchange. A Project of the Center for the Study of Evaluation. Los Angeles: University of California Center for the Study of Evaluation, 1969, 331p. [ED 035 530]

Three hundred and ninety-seven objectives and related evaluation items for reading in kindergarten through third grade are presented for the teacher and administrator in this collection developed by the Instructional Objectives Exchange (IOX) and sponsored by the Office of Education (DHEW). The objectives are organized into the categories of word recognition, comprehension, and study skills, with each category being further divided into subcategories. Four elements--(1) the objective, (2) measurement items, (3) means of judging the adequacy of student responses, and (4) an IOX rating--are included for each objective. In addition each of the objectives is accompanied by a sample measurement item which is designed to test the student's acquisition of the desired behavior. In most cases, specific answers to the sample items have been provided. When a single correct answer is impossible to supply, criteria for judging the adequacy of the student responses are included.

1366. Sartain, Harry W. Procedures for Evaluating Growth in Reading Skills. In Individualized Instruction in Reading, A Report of the Twentieth Annual Conference Course on Reading. Pittsburgh: University of Pittsburgh, 1964, 15p. [ED 015 092]

When they individualize reading instruction, teachers should realize that children are very different, and that continuous appraisal of each child's attributes and needs is imperative. Teachers should utilize informal evaluative techniques for appraising growth in reading skills. Readiness for beginning reading is determined by observing personal maturation traits, language development level, and behaviors manifesting pictorial interpretation abilities, story sense skills, and visual-discrimination skills. So that suitable materials are assigned to each child, it is necessary to determine his reading level by studying records of previous work and group or individual reading inventories. To insure appropriate instruction and balance in the development of various reading abilities, continuous appraisal of each child's difficulties and progress is achieved through teacher-pupil conferences, by recording individual extension reading, by analyzing errors in oral reading, comprehension, and work-study exercises, by conducting interest inventories, and by testing eye-voice span and auditory-memory span. To provide more evaluative techniques, a list of references and Strang's checklist record of classroom observation on pupil's reading are included.

Program Evaluation

1367. Barnes, Edward G. Measurement and Evaluation, 1966-67 (P. L. 89-10, Title I). Annual Report. Atlanta: Georgia State Department of Education, 1967, 121p. [ED 020 242]

In this annual evaluation report, the compensatory education activities and methods of Elementary and Secondary Education Act Title I programs in Georgia are described according to the format stipulated by the Office of Education. The extensive statistical data which constitute the bulk of the report give achievement test results, attendance and dropout rates, and the amount of the participants' higher education. Special reports, which contain data, are provided on school food services and special education programs for handicapped children. Among major achievements, it is reported that reading programs have raised students' achievement level, the use of teacher aides has been effective, and summer school programs have been a success. It is also felt that Title I expenditures on early childhood education have encouraged the institution of statewide public kindergartens.

1368. The Borg-Warner System 80 Program, December 1970-May 1971. Final Evaluation Report. Washington, D.C.: District of Columbia Public Schools, 1971, 70p. [ED 064 706]

To evaluate the effectiveness of the Borg-Warner System 80 in seven Washington, D.C., schools, interviews, pupil progress records, questionnaires, and observational data were gathered on 103 students and their teachers. Two Borg-Warner programmed series, "Learning Letter Names" and "Reading Words in Context," were used in remedial and developmental reading instruction during the study. Data analyses revealed (1) that pupils' attitudes toward reading became significantly more positive, (2) that both remedial and developmental students made significant gains in reading knowledge and improved reading habits (though the remedial group scored significantly lower than the developmental in the latter instance), (3) that significant increases in scores were achieved by the developmental students for "Learning Letter Names," and by the remedial students for "Reading Words in Context," and (4) that the initially high expectations the teachers held for the technology were "to a great extent" realized for instruction in the alphabet and for teaching word recognition in context.

1369. Bush, Steven J.; Karas, Shawky F. An Evaluation of the Occupationally Oriented Basic Education Program in Waterbury, Connecticut. Paper presented at the Annual Meeting of the New England Educational Research Organization, Boston, June, 1971, 16p. [ED 057 094]

The Waterbury, Connecticut, Board of Education is currently operating a Manpower Development and Training Act (MDTA) project in conjunction with Southern Connecticut State College in New Haven. It includes the adult basic education program and occupational skill training. The program provides basic elementary education to individuals functioning at or below the third-grade level in arithmetic and English, as well as those who are unable to speak, read, or write the English language. The objective of the project is to train unemployed youth and adults who have inadequate skills, to obtain and hold jobs, so they may become productive, functional members of society. The subjects were selected from terminees of the program who had been given the Basic Education Test (BET) upon entry and the Adult Basic Learning Exam (ABLE) during the training period. Analysis of variance and trend analysis were conducted, and the results indicate that the program was effective in giving its trainees an increase in educational attainment with a linear trend.

1370. Criteria for Assessing School Reading Programs: Kindergarten through High School. Hartford, Conn.: Connecticut Association for Reading Research, 1970, 28p. [ED 046 640. Also available from Mrs. Nora D. Adams, 269 Academy Road, Cheshire, Conn. 06410 ($1.25)]

A series of instruments designed by the Connecticut Association for Reading Research is offered to help a school staff improve reading education by identifying school practices that need improvement. Checklist questionnaires are provided for the following sections: (1) systemwide background information, (2) individual school background information, (3) individual staff member survey, (4) kindergarten, preprimary program, (5) elementary instructional reading programs, (6) content-area instructional reading program, (7) independent reading program, (8) remedial/corrective reading program, and (9) summary evaluations, commendations, and recommendations. Reasons for developing the criteria are presented as well as an explanation of how to use them.

1371. Eccles, J. J.; Moodie, A. G. An Evaluation of the Reading Efficiency Program at Windermere Secondary School during 1970-71. Vancouver, British Columbia: Vancouver Board of School Trustees, 1971, 15p. [ED 057 101]

In an evaluation of the reading efficiency course at Windermer Secondary School, the experimental group made greater gains (statistically significant at the .01 level) in the reading rate subtest of the Nelson-Denny Reading Test, than did the control group. The experimental group also made greater gains than the control group in reading rate on the subtests of the EDL Reading Versatility Test. The research results indicated that students' reading rates as measured by the Nelson-Denny Reading Test and the EDL Reading Versatility Test improved during the reading efficiency program at Windemere Secondary School.

1372. Evaluation Report of the Intensive Learning Center. Kansas City, Kan.: Kansas City Board of Education, 1970, 72p. [ED 060 144]

The intensive learning centers were installed in thirteen schools, eight of which were funded by ESEA Title I. The educational program consisted of placing two certified teachers in each classroom from kindergarten to grade two. High interest, high activity materials, and an optimum amount of audiovisual equipment were used. Program evaluation consisted of pretesting and posttesting at each grade level. A random sample of all students in the program were administered the Stanford-Binet Intelligence Test on a pretest and posttest basis. First-graders were administered the Metropolitan Readiness Test at the beginning of the year, and the Metropolitan Achievement Test, Lower Primary, was used. In addition, subjective evaluation was carried on by parent survey and teacher questionnaire. Several pages of this document are not clearly legible due to the quality of print in the original.

1373. Evaluation Report: Newark School District ESEA Title I Program 1970-71. Haddonfield, N.J.: Communication Technology Corp., Newark Board of Education, 1971, 122p. [ED 057 429]

This evaluation attempts to measure the extent and effectiveness of the 1970-71 Title I reading program for disadvantaged elementary and secondary children. The document is presented in five color-keyed sections that include (1) conclusions and recommendations; (2) program environment--a demographic view of Newark; (3) program description--the scope, objectives, and activities; (4) program evaluation; and (5) evaluation findings and discussion. A related document is ED 053 473.

1374. Evaluation Report: Newark School District ESEA Title I Program, Summer 1971. Haddonfield, N.J.: Communication Technology Corp., Newark Board of Education, 1971, 81p. [ED 056 397]

This evaluation attempts to measure the extent and effectiveness of the 1971 Newark ESEA Title I program that extended the regular school year reading program into the summer months for 19,391 pupils in grades K-12. The instructional activities encompassed remedial and developmental reading, development of language arts skills, and implementation of bilingual programs to improve the skills of both English- and Spanish-speaking children. A wide diversity of outdoor experiential activities that incorporated basic skills learning components were included. Evaluation data were assembled from interview and questionnaire results of a sample of personnel and students, standardized test scores, and onsite observations.

1375. Evaluation System Report on Reading Programs for School Year 1970-71. Series A: Reading Programs. Washington, D.C.: District of Columbia Public Schools, 1971, 68p. [ED 059 841]

Descriptions of reading programs and services related to elementary reading instruction in sixteen Washington, D.C., schools are included in this report. Data are reported for grade levels only, and combines information for all schools. Basal readers are the most commonly used materials, with approaches used with these materials varying greatly across and within grade levels. Linguistics/phonics, initial teaching alphabet, and language experience approaches are also commonly used, and both analytic and synthetic methods of word recognition were reported. This report contains descriptive information; no attempts were made to evaluate the effectiveness of programs. Data collected for this report will be analyzed, and a forthcoming publication will present evaluative information. Tables are included.

1376. Fleming, Margaret. An Approach to Evaluation of a Reading Program in the Public School Setting. Paper presented at the Annual Meeting of the Educational Research Association, Minneapolis, Minn., March 2-6, 1970, 12p. [ED 040 012]

A description of the evaluation plan used in the reading improvement project in Cleveland's Target Title I elementary schools is presented. The plan's information was influenced by two guidelines: (1) the necessity of providing for procedures to overcome threats to the validity of the findings so that some sound assessment of program effects could be made, and (2) a desire to remain sensitive and responsive to realities of the school worlds involved--particularly concerns of pupils and staff participating in the project. Three of the critical issues encountered, among many, and the solutions found for them, are given. The issues were (1) random assignment of pupils to project ~~services, (2) choice of a model of ana~~lysis appropriate to the program's data collection procedures, and (3) the determination of whether or not experimental and control pupils received significantly different final reading marks from their classroom teachers. Covariated and dependent variables used as factors in the evaluation are listed.

1377. Furlong, William. Evaluator's Profile and Selection Procedures. Bloomington, Indiana University Measurement and Evaluation Center in Reading Education, 1970, 30p. [ED 053 904. Also available from Reading Program, School of Education, Indiana University, ($0.75)]

A profile of Title I and III reading program evaluators from data collected on a survey of 299 evaluators was made. The survey consisted of four sections: (1) the evaluator--information on his educational background and training and on the programs with which he was connected; (2) data collection--information on the sorts of data the evaluator collected; (3) reporting--information on the nature of the reports made and for whom they were intended; and (4) tests--information on the types of tests used in the evaluations. Surprisingly few (30.4 percent) of the evaluators had had any formal course work in evaluation, yet 79.3 percent were responsible for writing evaluation reports, and the majority were responsible for evaluating objectives of projects, instructional procedures, materials and staff. The majority of the evaluators developed criteria for evaluation from information from local teachers and consultants. It was questionable whether the teachers were actually evaluated. Most evaluation data came from examination of testing programs which are described in detail. Most reports were to state Departments of Education, and most were written only to meet federal regulations. Tables of data, the survey, and survey responses are included. This study was sponsored by USOE.

1378. Guinet, Lynne. An Evaluation of the Intermediate Language Arts Program at Nootka Elementary School, for the 1970-71 School Year. Vancouver, British Columbia: Vancouver Board of School Trustees, 1971, 27p. [ED 057 104]

The main objective of this program was to increase pupil achievement, library use, and interest in all areas of language arts, with instructional emphasis placed on individual attention and small group work. The program appears to have had some measure of success in achieving its objectives, and the teachers, librarian, observer, and principal were generally positive about the program. Although reading achievement and attitude were good for the most part, there high percentages of poor readers and pupils with poor attitudes towards reading. Further investigation is recommended. The results of the reading tests, a breakdown of library activities by grade and number of students participating, and teacher response to the program are included.

1379. Ironside, Roderick A. Who Assesses Reading Status and Progress--Tests, Teachers, or Students? Paper presented at the Annual Meeting of the College Reading Association, Boston, March 13-15, 1969, 11p. [ED 031 374]

Student involvement in the assessment of reading status and progress is important, because of the effectiveness of teachers and tests as evaluators has limitations. Translating test results into meaningful behavioral descriptions is a difficult task, and teacher assessment is sometimes limited by the temptation to respond quickly and definitely to a single factor such as score, an incident, or an aspect of reading, Teachers exhibit a tendency to assess the status and needs of a student and then to conduct improvement programs which often ignore those needs. The students, because of personal motivation and understanding, can help to define realistic objectives for reading and studying, and for assessing their own performances. Students' needs and goals are essential elements in devising reading improvement programs on the high school and college levels.

1380. Janowitz, Gayle. After-School Study Centers: Experimental Materials and Clinical Research. Final Report. Chicago: Illinois Institute of Technology, 1968, 369p. [ED 051 342]

This is the report of a three-year demonstration program sponsored by USOE and designed to explore the potentials and limitations in the use of volunteers in inner-city education. Four centers in Chicago supplied sites for training and research. Program emphasis was on one-to-one tutoring at least once a week for predominantly black and poor primary school children no more than one and one-half years below grade level academically; academic groups were combined with leisure, some auxiliary services, and cultural activities. The research design compared academic achievement in reading before and after tutoring, as measured by the Gates Reading Tests. Participants and control groups were tested. Reactions of tutors and coordinators were gathered, as well as a community study to gather factors affecting organizational stability of centers. Among the findings, one of the major handicaps in the development of volunteer work was the lack of ability on the part of the professionals to relate effectively to non-professionals and to help them develop effective skills. This document is reproduced from the best available copy. Chapter X and Appendixes 1-5, although listed in the contents, were missing from the original document.

1381. Multiple Activities Program. An Evaluation. ESEA Title I, September, 1970 to June, 1971. Omaha, Nebr.: Omaha Public Schools, 1971, 206p. [ED 060 141]

Contents of this evaluation include general information; program evaluation; dissemination of information; media center; extended opportunities including supervised study, career opportunities, Saturday speech, instrumental and vocal music, teacher inter, projects "Read" and "Math," and kindergarten language development; reading programs; psychological services; community aides; educational trips; personnel needs; evaluation and interpretation; numerical information; financial worksheets; project data; activity data; teacher participation; and a survey of supporting staff.

1382. Quilling, Mary R. The Reading Achievement of Primary Age Pupils using the Wisconsin Design for Reading Skill Development: A Comparative Study. Paper presented at the Annual Meeting of the American Educational Research Association, New York, February 4-7, 1971, 15p. [ED 049 902]

Prepared by the Wisconsin Research and Development Center for Cognitive Growth, the Wisconsin Design for Reading Skill Development (Design) contains several components. The field study evaluation of the word attack element in terms of attainment of objectives is reported in this conference paper. All children in grades 1 to 3 of two Wisconsin schools participated in the program evaluation during the 1969-70 school year. They were tested at the beginning and at the end of the program using Design-developed, criterion-referenced tests, and selected subtests of the Doren Diagnostic Reading Test. Both tests registered greater gains for students who had Design instruction over those who had not. In school A, where the Stanford Achievement Test is used, no gains were noted for the Design group, and possible reasons for this are discussed. In school B, where the Gates-MacGinitie Reading Test is used, greater gains were noted for the Design group. Tables of results are included.

1383. Reid, Marilyn J. An Evaluation of the Ginn "Reading 360" Programme in a Grade 3 Class of An Elementary School in Vancouver. Vancouver, British Columbia: Vancouver Board of School Trustees, 1971, 14p. [ED 057 109]

Evaluates the Ginn Reading 360 Programme, which is based on the premise that real reading is comprised of four essential parts: decoding, understanding the written message, critically evaluating that message, and incorporating the writer's ideas into one's own thinking and actions. A comparative study of the reading skills of a group of third-graders participating in the Ginn program and a group using the regular program showed no significant differences between the groups on any of the subtests in either pretesting or posttesting. Teacher opinion of the Ginn program, however, was positive.

1384. Report on the Second Florida Instructional Seminar on Evaluation. Tallahassee: Florida State Department of Education: Orlando, Fla.: Orange County Board of Public Instruction, 1968, 77p. [ED 043 676]

The participants in the second Florida Seminar on Evaluation were divided into two principal groups: technical evaluation information and evaluation models in selected areas. In the technical evaluation information subgroups, technical material involved in the evaluation process was presented. A topical outline of this material is provided. The evaluation models subgroups developed models in the areas of reading (two models), communication skills, arithmetic, guidance, and self-concept programs. These models are part of the report. The texts of two of the major addresses are included. "Evaluation and the Two-Party Monologue," by Jarvis Barnes, and "Education for Imagination," by Harry M. Sparks. Finally, the seminar itself is evaluated, and suggestions and recommendations for followup programs are presented.

1385. Resta, Paul E.; Hanson, Ralph A. Installation Requirements for the SWRL First-Year Communication Skills Program: Evaluation Data, 1968-69. Inglewood, Calif.: Southwest Regional Educational Laboratory, 1971, 66p. [ED 057 993]

A Summary of the Information Acquired during a 1968-69 study by the Southwest Regional Laboratory to determine requirements for the installation of the First-Year Communication Skills Program, an objective-based kindergarten reading program, is presented. The 32-week program was organized into ten equal units of instruction, whose general instructional procedures were (1) to introduce the sequential activities in each unit, (2) to administer a criterion exercise or test, and (3) to provide practice exercises for those who fail to achieve mastery. Subjects were 2,100 children from 26 schools in five urban districts in three states. The training procedure, materials used, data acquisition, and instrumentation are described in detail. The tryout program is evaluated in terms of the effectiveness of the training and management procedures and the overall program effectiveness in classroom settings. Pupil performance is analyzed on an overall basis and in relation to pupil characteristics. Open-ended questionnaires were developed to receive response from users. The management, training, instructional procedures, and evaluation systems related to the installation of the program were also specified and defined. Tables and figures are included.

1386. Robbins, Edward L. A Measure of the Appropriateness of Data Collection Techniques for Classroom Decision-Making. Paper presented at the Annual Meeting of the International Reading Association, Atlantic City, N.J., April 19-23, 1971, 8p. [ED 052 909]

The relationship between the importance of the objectives of a public school reading program and the extent of data collection efforts pertaining to these objectives was examined. The purpose of the study was to determine if the information collected was sufficient for teachers to make a continuous evaluation of the program's ability to meet the objectives. An instrument containing 102 reading objectives, the Reading Objective Information Inventory (ROII), was administered to 24 elementary teachers in eleven schools. Sixty objectives in the ROII were delineated as "important," and the availability of information to measure the achievement of these 60 objectives was assessed. Results showed that (1) the relationship between the importance of the objectives and the overall availability of information to measure their achievement correlated .55; (2) in evaluating the effectiveness of data collection for each of the objectives, only nine objectives reflected a significant relationship between importance and data availability; (3) in comparing the differences in data collection effectiveness among three kinds of objectives (word recognition, comprehension, and work study skills), the proporation of comprehension objectives with a significant importance-availability relationship was significantly higher than for word recognition or work-study skills objectives.

1387. Scates, Malcolm. An Evaluation of P.R.O.B.E. A Program for the Recruitment of Beginning Educators. Part I, Part II, Part III. Washington, D.C.: District of Columbia Public Schools, 1970, 70p. [ED 055 029]

The major objective of PROBE is to provide the beginning teacher with the support, assistance, and training needed for success during the initial stages of a career in teaching. The program--in the Model School Division--provides a two-week period of intensive training and orientation prior to the opening of school, continuing individual support and assistance throughout the year, and three one-day released-time workshops during November, December, and January. The content of the program consists of human relations difficulties, and resource use. Each stage of the program was evaluated by the three-member staff and 35 participants on its success in these areas. The results of the evaluation questionnaires indicated that results of the program was largely successful in attaining its objectives. Suggestions for improvement included lengthening the program, providing more direct contact with children, and expanding the program to include all new teachers. A problem noted in participants' reactions was that although all the teachers were new to the Model Schools division, some had had previous teaching experience and thus had different concerns and interests than the beginning teachers. The report includes copies of evaluation questionnaires used and tables of responses to each item.

1388. Schweitzer, Paul; and others. Evaluation of State Urban (CEC) Programs District 19, New York City Board of Education. Bronx, N.Y.: Fordham University Institute for Research and Evaluation, 1971, 130p. [ED 060 151]

The five state urban education C.E.C. programs in District 19 include Project Excellence, a recycled clinical program which provides diagnostic, referral, and educational service to elementary and junior school students who demonstrate some difficulty in their scholastic and/or emotional adjustment to school. In Operation Reading Success for sixth-grade students, state urban education funds provide for the training and services of eight paraprofessionals who assist in improving the reading skills of sixth graders in four district schools. A third project, the J.F.K. Supplementary Education Centers, is a recycled program which provides after-school and Saturday academic, vocational, social, recreational, cultural, and guidance services to students at eight district centers. The responsive environment program provides remedial reading instruction to approximately 360 second and third graders in the district by means of a "talking typewriter." The Fifth State Urban Education Project, the administrative component, is attached to the office of the assistant superintendent in District 19.

1389. Short, N. J. PIC Program Evaluation Forms. Minneapolis, Minn.: Minneapolis Public Schools, 1971, 20p. [ED 060 034. Document not available from EDRS; not available separately; see ED 060 028]

These four questionnaires are designed to elicit teacher and parent evaluations of the Prescriptive Instruction Center (PIC) program. Included are teacher evaluation of program effectiveness (14 items), M & M evaluation of program implementation (methods and materials specialists; 11 items), teacher evaluation of program effectiveness--case study program (6 items), and parent evaluation of PIC program (6 items). See ED 060 028 for a description of the program.

1390. Smith, Carl B.; Farr, Roger. Evaluation Training: Simulation Exercises. 2nd ed. Bloomington, Ind.: Indiana University Measurement and Evaluation Center in Reading Education, 1971, 98p. [ED 054 917. Also available from Reading Program, School of Education, Indiana University ($4.00)]

The preparation of this simulation material package is guided by the concept of an evaluator as a decision maker, based on the definition of evaluation as a continuous assessment concerned with answering decision-making questions. The continuous concept of evaluation is based on the model created by Egon Guba and Daniel Stufflebeam, named by its acronym CIPP--context, input, process, and product evaluation. Sections are devoted to describe and explain the CIPP evaluation model. The intent of this evaluation game is to provide an instructional tool for applying the concept of continuous evaluation to a reading program. Its specific goal is to teach the participant to use one evaluation model as a guide to knowing what to do and what to decide. The materials describe a school system that hires an evaluator who must help conceive a reading program as well as assess it. The incidents described try to stimulate actual school situations. There are three kinds of pages in this simulation game, each marked by a different color: white pages carry descriptions of situations, green pages are response sheets, and pink pages carry the "omniscient comments," or answers proposed by the authors.

1391. Urban Lab in Education, An Education Improvement Project, Atlanta, Georgia. Annual Report, 1970-71. Atlanta: Urban Lab in Education, 1971, 159p. [ED 055 749]

A successful two-year reading program in Atlanta, Georgia, is evaluated from several points of view and in various ways. The program involved changes in the physical plant, teaching techniques, instructional objectives, inservice education, and community involvement of the three participating elementary schools. Emphasis was on the improvement of reading skills through the use of new materials, diagnosis of student abilities, a variety of teaching methods, specified behavioral objectives, and the help of volunteer teacher aides. The program sent teachers out into the community to teach parents about early childhood development, reading development, and the role of parents in the education of children. Evaluation of the program includes (1) results of the Metropolitan Achievement Tests, which showed significant improvement of reading levels; (2) evaluative statements by three reading consultants; (3) a detailed account of the school's adult education program, its enrichment and recreation activities for children, and special events for the community; (4) surveys of teachers, parents, and administrators; and (5) a statement by the program director. Tables, photographs, and evaluation forms are included.

1392. Vocabulary Development Project. Evaluation Report. St. Louis, Mo.: St. Louis Public Schools, 1971, 56p. [ED 059 838]

The St. Louis Vocabulary Development Project was developed to help children cope with the increasing vocabulary demands in content area textbooks encountered in the fourth grade. The project was presented over the school radio system for thirty minutes daily, three days weekly for thirty weeks in about 150 schools. The fifth- and sixth-graders were taught 1,800 words, and the fourth-graders received 585. For each radio lesson the students were pretested and posttested. The Iowa Tests of Basic Skills and the Lorge-Thorndike Intelligence Tests were administered before and after the project. Test results were factor analyzed and correlated with gains in vocabulary development. A teacher questionnaire was also administered. It was found that (1) the vocabulary development project had positive effects on measured achievement growth in general vocabulary and spelling; (2) it had a small, but positive, effect on measured changes in reading achievement and intelligence; (3) the effects on achievement vairables were greatest for students in predominantly black schools; and (4) teachers generally favored the project. Tables and references are included.

1393. Wallen, Carl J.; Wisely, Steven R. Analysis of Elementary Reading Program, Winston-Dillard School District No. 116, Douglas County, Oregon. Eugene, Ore.: University of Oregon Bureau of Educational Research and Service, 1970, 45p. [ED 046 623]

The major focuses of this reading program survey were staff preparation, instructional techniques, educational materials, and pupil achievement. Data were obtained from 47 teachers (14 men and 33 women) who represented reading instruction in grades 1 through 8. The following items were analyzed in detail: personnel description (age, sex, and degree), courses taken in reading, teaching experience, class schedules, materials used, student achievement (using the Otis-Lennon Intelligence Test and the Stanford Achievement Test), class sizes, grouping practices, and correlation of subject areas to reading activities. The Instructional Skills in Reading Test was administered to 43 teachers, and observations concerning reading materials in the school district were made. Recommendations were made by the teaching staff and by the Bureau of Educational Research survey team of the University of Oregon College of Education, who conducted the survey. Extensive tables and figures are given.

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Communication Skills
057 993 (1385)

Communication (Thought Transfer)
041 258 (1336)

Community Colleges
041 951 (1297)

Comparative Analysis
056 059 (1250)
065 585 (1363)

Compensatory Education
002 479 (1169)
037 505 (1362)
056 397 (1374)
057 429 (1373)

Compensatory Education Programs
020 242 (1367)
060 141 (1381)
060 144 (1372)
060 151 (1388)
062 459 (1340)

Complexity Level
040 833 (1358)

Composition (Literary)
040 185 (1352)

Comprehension
041 043 (1218)
061 805 (1323)

Comprehension Development
003 062 (1268)

Computer Assisted Instruction
028 025 (1191)
042 357 (1302)

Conference Reports
054 202 (1324)
068 916 (1184)

Content Analysis
064 672 (1354)

Content Reading
071 056 (1275)

Context Clues
014 388 (1201)

Conversational Language Courses
037 710 (1338)

Correlation
046 667 (1212)
054 914 (1206)
061 020 (1359)
065 849 (1260)

Creoles
046 618 (1326)

Criterion Referenced Tests
049 285 (1309)
054 202 (1324)
054 233 (1269)
057 984 (1320)

Critical Reading
018 335 (1173)
046 667 (1212)
064 672 (1354)
064 678 (1261)
065 849 (1260)

Critical Thinking
046 667 (1212)
064 678 (1261)
065 830 (1323)
065 849 (1260)

Cross Cultural Studies
064 351 (1305)

Culturally Advantaged
003 463 (1266)

Culturally Disadvantaged
003 463 (1266)
024 542 (1341)
055 122 (1215)

Curriculum Design
045 651 (1233)

Curriculum Evaluation
046 640 (1370)

Data Collection
052 909 (1386)

Decision Making
052 909 (1386)
060 391 (1311)

Deductive Methods
061 012 (1283)

Deep Structure
038 254 (1298)

Developmental Reading
070 048 (1310)

Diagnostic Teaching
022 629 (1236)
029 754 (1193, 1227)
030 540 (1237)
062 106 (1187)

Diagnostic Tests
001 900 (1180)
020 081 (1196, 1230)
023 296 (1170)
027 144 (1179)
045 287 (1175)
049 285 (1309)
060 029 (1194, 1228)
062 106 (1187)
068 916 (1184)

Directed Reading Activity
063 594 (1164)

7-8

Disadvantaged Youth
020 242 (1367)
033 998 (1360)
037 311 (1335)
037 505 (1362)
045 651 (1233)
056 392 (1374)
057 429 (1373)

Early Childhood Education
044 448 (1301)

Early Reading
067 620 (1176)

Educational Accountability
054 233 (1269)
054 528 (1321)
058 315 (1322)
063 335 (1314)
073 448 (1319)

Educational Attitudes
056 059 (1250)
056 088 (1253)
056 089 (1251)

Educational Diagnosis
038 260 (1349)
045 287 (1175)

Educational Economics
054 528 (1321)

Educational Experiments
061 645 (1317)

Educational Objectives
016 654 (1213)
052 909 (1386)
063 335 (1314)
064 325 (1315)

Educational Opportunities
060 141 (1381)

Educational Radio
059 838 (1392)

Educational Research
060 391 (1311)

Educational Responsibility
060 002 (1313)

Educational Testing
033 998 (1360)

Effective Teaching
003 062 (1268)
054 200 (1221)

Elementary Education
057 094 (1369)

Elementary Grades
018 335 (1173)
019 202 (1278)
023 296 (1170)
041 906 (1361)
045 291 (1254)
046 623 (1393)
049 285 (1309)
055 749 (1391)
059 841 (1375)
060 028 (1344)
060 029 (1194, 1228)
060 030 (1195, 1229)
063 594 (1164)
064 325 (1315)
066 443 (1296)

Elementary School Curriculum
057 104 (1378)

Elementary School Science
024 563 (1259)

Elementary School Students
020 081 (1196, 1230)
022 631 (1258)
046 657 (1281)
052 230 (1226)
056 795 (1318)
062 459 (1340)
066 715 (1293)

Elementary School Teachers
029 754 (1193 1227)

English
041 951 (1297)

English Instruction
016 654 (1213)
060 002 (1313)

English (Second Language)
060 757 (1327)
041 258 (1336)

Evaluation
011 497 (1214)
020 082 (1353)
024 563 (1259)
054 917 (1390)
060 579 (1342)

Evaluation Criteria
025 396 (1165)
033 998 (1360)
046 640 (1370)
063 335 (1314)
073 433 (1209)

Evaluation Methods
038 710 (1267)
041 906 (1361)
053 904 (1377)
058 315 (1322)
064 409 (1351)

Evaluation Needs
063 093 (1312)

Evaluation Techniques
015 092 (1366)
025 396 (1165)
026 211 (1244)
033 998 (1360)
035 530 (1365)
038 710 (1267)
040 185 (1352)
043 676 (1384)
064 387 (1308)
065 585 (1363)

Exceptional Child Education
026 771 (1331)

Exceptional Child Research
025 055 (1347)
060 596 (1348)

Exceptional Child Services
060 028 (1344)
060 579 (1342)

Experimental Programs
037 505 (1362)

Eye Hand Coordination
015 510 (1346)

Factor Analysis
050 895 (1223)

Factor Structure
044 448 (1301)

Federal Programs
020 242 (1367)
037 505 (1362)
053 904 (1377)
056 397 (1374)
056 795 (1318)
057 429 (1373)

Field Studies
057 993 (1385)

Forced Choice Technique
056 087 (1252)

Functional Illiteracy
019 548 (1167)

Grade Equivalent Scores
069 782 (1216)

Grade Point Average
057 089 (1289)

Grade 1
046 999 (1345)
050 895 (1223)
073 438 (1287)

Grade 2
067 617 (1205)

Grade 3
057 109 (1383)

Grade 4
028 910 (1183)

Grade 7
064 387 (1308)

Grade 8 019 206 (1241)

Grade 12
014 397 (1256)
046 667 (1212)

Group Intelligence Tests
054 914 (1206)

Group Norms
022 973 (1210)

Guidelines
040 012 (1376)

High School Students
057 101 (1371)

High Schools
031 374 (1379)

Identification
060 596 (1348)

Individual Differences
014 373 (1255)

Individual Instruction
023 296 (1170)

Individual Tests
019 205 (1204)

Individualized Instruction
026 203 (1198)
063 576 (1172)
064 409 (1351)
064 693 (1177)

Individual Reading
015 092 (1366)
020 079 (1199, 1234)
044 436 (1343)
070 048 (1310)

Inductive Methods
061 012

Informal Reading Inventory
016 565 (1242)
019 206 (1241)
022 622 (1238)
022 629 (1236)
022 631 (1248)
026 211 (1244)
030 540 (1237)
032 198 (1240)
032 199 (1243)
040 029 (1249)
046 672 (1246)
071 042 (1247)
072 437 (1182)

Information Processing
020 084 (1270)
061 805 (1328)

Information Systems
058 315 (1322)

Inservice Education
064 688 (1166)

Inservice Teacher Education
022 622 (1238)
022 629 (1236)
032 198 (1240)

Instructional Aids
072 437 (1182)

Instructional Design
038 710 (1267)
051 966 (1316)

Instructional Improvement
035 530 (1365)
055 749 (1391)

Instructional Materials
011 497 (1214)
054 917 (1390)

Instructional Materials Centers
060 028 (1344)
060 034 (1389)

Instructional Programs
043 676 (1384)

Instructional Technology
064 706 (1368)

Intelligence Tests
046 999 (1345)

Interaction
061 020 (1359)

Interdisciplinary Approach
038 260 (1349)

Interest Tests
045 291 (1254)

Intermediate Grades
059 838 (1392)

International Programs
064 351 (1305)

Item Analysis
037 306 (1272)

Junior Colleges
053 714 (1178)

7-10

Junior High School Students
054 194 (1206)

Kindergarten
057 993 (1385)

Kindergarten Children
020 081 (1196, 1230)
049 311 (1295)
060 596 (1348)
065 538 (1290)

Language
026 771 (1331)
064 656 (1333)

Language Ability
037 311 (1335)

Language Arts
061 654 (1213)
045 651 (1233)
046 944 (1329)
057 104 (1378)

Language Development
043 657 (1337)
062 459 (1340)
064 655 (1332)

Language Handicaps
011 417 (1330)

Language Instruction
041 258 (1336)

Language Learning Levels
041 709 (1181)

Language Research
011 417 (1330)
046 618 (1326)
046 626 (1334)
052 898 (1339)

Language Skills
024 542 (1347)
060 757 (1327)

Language Tests
037 710 (1338)
043 657 (1337)
060 757 (1327)

Learning
025 055 (1347)
026 227 (1282)

Learning Activities
050 904 (1350)

Learning Difficulties
044 436 (1343)
060 028 (1344)
060 579 (1342)

Learning Disabilities
038 260 (1349)
046 999 (1345)
060 596 (1348)

Learning Motivation
018 345 (1192)

Learning Processes
041 043 (1218)

Linguistic Competence
037 710 (1338)

Linguistic Patterns
011 480 (1217)

Linguistics
038 254 (1298)
052 898 (1339)

Listening Skills
003 062 (1268)

Literature Appreciation
041 906 (1361)

Literature Reviews
050 893 (1277)

Longitudnal Studies
003 463 (1266)
040 845 (1294)
041 976 (1285)
049 311 (1295)

Lower Class Students
002 599 (1291)

Manpower Development
057 094 (1369)

Mathematical Linguistics
052 898 (1339)

Mathematical Models
052 898 (1339)

Mathematical Vocabulary
071 056 (1275)

Mathematics
064 336 (1222)

Mathematics Education
040 881 (1276)

Maturity Tests
014 391 (1258)

Measurement
040 832 (1356)
047 900 (1211)
049 906 (1208)
054 202 (1324)

Measurement Goals
020 082 (1355)

Measurement Instruments
040 185 (1352)
043 657 (1337)
049 906 (1208)
050 893 (1277)

Measurement Techniques
001 544 (1353)
013 742 (1364)
019 202 (1278)
035 514 (1280)
040 833 (1358)
040 836 (1263)
041 906 (1361)
053 714 (1178)

Memory
041 043 (1218)

Migrant Child Education
057 984 (1320)

Minority Group Children
002 479 (1169)

Models
043 676 (1384)
044 436 (1343)
064 409 (1351)

Modern Languages
019 037 (1225)

7-11

National Surveys
052 230 (1226)
053 904 (1377)

Observation
018 345 (1192)

Oral English
046 618 (1326)

Oral Expression
037 710 (1338)

Oral Reading
019 202 (1278)
026 211 (1244)

Parent Attitudes
060 034 (1389)

Perception Tests
001 900 (1180)
014 391 (1258)
022 634 (1265)

Perceptual Development
003 463 (1266)
014 391 (1258)
022 634 (1265)
066 715 (1293)

Perceptual Motor Coordination
025 055 (1347)

Perceptual Motor Learning
050 904 (1350)

Perceptually Handicapped
050 905 (1350)

Performance Contracts
054 528 (1321)
060 391 (1311)
061 645 (1317)
063 097 (1306)
063 337 (1325)
064 387 (1308)
070 048 (1310)
073 448 (1319)

Performance Criteria
047 911 (1307)
054 233 (1269)
061 645 (1317)
063 097 (1306)

Performance Factors
041 384 (1189)
040 185 (1352)

Performance Specifications
064 325 (1315)

Performance Tests
054 200 (1221)
069 782 (1216)

Personality Assessment
014 400 (1186)

Phonemes
032 514 (1262)

Phonics
014 388 (1201)

Predictive Ability (Testing)
024 550 (1303)
041 723 (1299)
041 951 (1297)
041 976 (1285)
044 448 (1301)
046 999 (1345)
049 311 (1295)
053 869 (1286)
057 089 (1289)
057 090 (1288)
065 538 (1290)
073 438 (1287)

Predictive Measurement
002 599 (1291)
011 480 (1271)
038 254 (1298)
040 845 (1294)
042 357 (1302)
060 596 (1348)

Predictive Validity
016 582 (1292)
023 656 (1274)
050 895 (1223)
051 983 (1202)
064 351 (1305)

Predictor Variables
049 311 (1295)
062 106 (1187)
066 443 (1296)

Preservice Education
022 629 (1236)

Primary Education
041 043 (1218)
046 944 (1329)

Primary Grades
014 391 (1258)
023 565 (1274)
040 185 (1352)
047 900 (1211)
053 869 (1286)
056 059 (1250)
056 087 (1252)
056 088 (1253)
056 089 (1251)
064 688 (1166)

Profile Evaluation
053 904 (1377)

Program Descriptions
051 342 (1380)
059 841 (1375)

Program Design
043 676 (1384)

Program Effectiveness
060 034 (1389)
064 706 (1368)

Program Evaluation
020 242 (1367)
033 998 (1360)
040 012 (1376)
043 676 (1384)
046 623 (1393)
049 902 (1382)
051 342 (1380)
053 904 (1377)
054 917 (1390)
055 749 (1391)
056 397 (1374)
056 795 (1318)
057 094 (1369)
057 101 (1371)
057 109 (1383)
057 429 (1373)
058 315 (1322)
059 838 (1392)
060 028 (1344)
060 034 (1389)
060 141 (1381)
060 144 (1372)
060 151 (1388)
060 391 (1311)
063 337 (1325)
064 387 (1308)

Pronunciation
  046 626 (1334)

Psycholinguistics
  011 417 (1330)
  026 771 (1331)

Psychometrics
  063 096 (1257)

Questioning Techniques
  064 672 (1354)

Rating Scales
  056 059 (1250)
  056 087 (1252)
  056 088 (1253)
  056 089 (1251)
  060 029 (1194, 1228)

Readability
  016 582 (1292)
  020 084 (1270)
  023 565 (1274)
  027 145 (1284)
  035 514 (1280)
  046 657 (1281)
  051 975 (1273)
  053 714 (1178)
  054 233 (1269)

Reading
  025 055 (1347)
  026 227 (1282)
  045 291 (1254)
  054 200 (1221)
  064 655 (1332)
  065 830 (1323)
  065 852 (1304)
  066 714 (1357)

Reading Ability
  003 062 (1268)
  013 732 (1264)
  019 548 (1167)
  069 700 (1220)
  073 438 (1287)

Reading Achievement
  011 497 (1214)
  015 092 (1366)
  037 311 (1335)
  040 845 (1294)
  041 723 (1299)
  046 618 (1326)
  049 285 (1309)
  049 311 (1295)
  049 906 (1208)
  053 869 (1286)
  059 838 (1392)
  062 459 (1340)
  063 335 (1314)
  063 337 (1325)
  064 689 (1163)
  065 852 (1304)
  066 715 (1293)

Reading Centers
  049 890 (1190)

Reading Comprehension
  001 544 (1353)
  014 397 (1256)
  019 206 (1241)
  020 084 (1270)
  022 631 (1248)
  027 145 (1284)
  037 306 (1272)
  038 254 (1298)
  040 833 (1358)
  040 881 (1276)
  047 911 (1307)
  052 898 (1339)
  054 914 (1206)
  057 101 (1371)
  061 019 (1219)
  063 096 (1257)
  064 672 (1354)
  065 830 (1323)

Reading Development
  071 042 (1247)

Reading Diagnosis
  014 384 (1189)
  014 388 (1201)
  014 400 (1186)
  018 345 (1192)
  020 079 (1199, 1234)
  022 622 (1238)
  025 396 (1165)
  025 402 (1197, 1231)
  026 303 (1198, 1232)
  027 152 (1188)
  028 025 (1191)
  029 754 (1193, 1227)
  032 199 (1243)
  033 258 (1174)
  038 260 (1349)
  041 709 (1181)
  043 452 (1200, 1235)
  046 672 (1246)
  053 714 (1178)
  063 094 (1185)
  063 097 (1306)
  063 576 (1172)
  064 688 (1166)
  064 689 (1163)
  064 693 (1177)
  067 620 (1176)
  068 916 (1184)
  071 042 (1247)
  073 426 (1171)

Reading Difficulty
  002 479 (1169)
  011 480 (1271)
  014 400 (1186)
  018 345 (1192)
  025 402 (1197, 1231)
  026 207 (1168)
  040 881 (1276)
  041 723 (1299)
  041 976 (1285)
  044 436 (1343)
  057 090 (1288)
  068 571 (1245)
  071 056 (1275)

Reading Games
  027 152 (1188)

Reading Improvement
  022 622 (1238)
  040 012 (1376)
  047 900 (1211)
  051 342 (1380)
  057 104 (1378)
  065 830 (1323)
  066 715 (1293)

Reading Instruction
  020 079 (1199, 1234)
  022 629 (1236)
  024 542 (1341)
  028 910 (1183)
  029 754 (1193, 1227)
  035 530 (1365)
  041 709 (1181)
  046 640 (1370)
  049 902 (1382)
  051 966 (1316)
  052 909 (1386)
  059 841 (1375)
  060 002 (1313)
  061 022 (1224)
  063 093 (1312)
  063 094 (1185)
  064 387 (1308)
  064 693 (1177)
  064 706 (1368)
  065 830 (1323)
  073 488 (1319)

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Reading Level
014 373 (1255)
015 092 (1366)
019 205 (1204)
023 565 (1274)
027 145 (1284)
032 198 (1240)
032 199 (1243)
046 672 (1246)
051 975 (1273)
057 984 (1320)
059 010 (1239)

Reading Material Selection
020 084 (1270)
061 022 (1224)

Reading Materials
027 145 (1284)
027 152 (1188)

Reading Processes
033 258 (1174)
041 709 (1181)
063 096 (1257)

Reading Programs
031 374 (1379)
038 710 (1267)
040 012 (1376)
045 287 (1175)
046 623 (1393)
046 640 (1370)
052 909 (1386)
054 917 (1390)
055 749 (1391)
057 109 (1383)
057 993 (1385)
058 315 (1322)
059 841 (1375)
060 141 (1381)
060 144 (1372)
063 097 (1306)
063 337 (1325)
064 325 (1315)
070 048 (1310)

Reading Readiness
002 599 (1291)
014 391 (1258)
015 092 (1366)
020 081 (1196, 1230)
037 311 (1335)
041 723 (1299)
064 693 (1177)
065 620 (1176)

Reading Readiness Tests
015 510 (1346)
022 634 (1265)
022 973 (1210)
024 550 (1303)
044 448 (1301)
050 895 (1223)
051 983 (1202)
053 869 (1286)
060 030 (1195, 1229)
062 104 (1300)
065 585 (1363)
073 433 (1209)

Reading Research
011 480 (1271)
011 497 (1214)
013 732 (1264)
013 742 (1364)
014 397 (1256)
014 400 (1186)
015 510 (1346)
016 582 (1292)
019 206 (1241)
022 631 (1248)
022 644 (1279)
022 973 (1210)
024 542 (1341)
024 550 (1303)
025 402 (1197, 1231)
028 910 (1185)
033 258 (1174)
035 514 (1280)
040 012 (1376)
040 832 (1356)
040 836 (1263)
044 448 (1301)
046 623 (1393)
046 626 (1334)
046 657 (1281)
047 900 (1211)
049 890 (1190)
040 893 (1277)
053 869 (1286)
054 914 (1206)
061 012 (1283)
062 104 (1300)
062 106 (1187)
065 849 (1260)
065 852 (1304)
067 620 (1176)
067 617 (1205)
068 916 (1184)
073 438 (1287)

Reading Skills
002 599 (1291)
014 373 (1255)
014 388 (1201)
027 152 (1188)
043 452 (1200, 1235)
051 966 (1316)
057 109 (1383)
060 029 (1194, 1228)
060 757 (1327)
063 576 (1172)
064 678 (1261)
064 693 (1177)
065 538 (1290)

Reading Speed
001 544 (1353)
047 911 (1307)
057 101 (1371)

Reading Tests
001 544 (1353)
014 373 (1255)
016 565 (1242)
018 335 (1173)
019 206 (1241)
019 548 (1167)
020 082 (1355)
022 973 (1210)
025 396 (1165)
027 144 (1179)
029 754 (1193, 1227)
033 258 (1174)
037 306 (1272)
037 311 (1335)
040 020 (1207)
040 832 (1356)
043 452 (1200, 1235)
046 667 (1212)
047 900 (1211)
047 911 (1307)
049 890 (1190)
049 906 (1208)
051 983 (1202)
053 714 (1178)
054 202 (1324)
057 089 (1289)
057 090 (1288)
057 104 (1378)
057 109 (1383)
059 010 (1239)
060 757 (1327)
061 019 (1219)
061 805 (1328)
064 336 (1222)
064 351 (1305)
064 655 (1332)
064 678 (1261)

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065 538 (1290)
066 714 (1357)
067 617 (1205)
068 916 (1184)
069 782 (1216)
071 042 (1247)
071 059 (1203)
072 437 (1182)
073 426 (1171)
073 433 (1209)
073 438 (1287)
073 488 (1319)

Remedial Programs
057 094 (1369)

Remedial Reading
025 402 (1197, 1231)
026 203 (1198, 1232)
057 101 (1371)

Remedial Reading Programs
002 479 (1169)

Remedial Teachers
025 402 (1197, 1231)

Research
011 417 (1330)

Research and Development Centers
049 902 (1382)
051 966 (1316)

Research Design
061 020 (1359)

Research Methodology
026 207 (1168)

Research Problems
037 505 (1362)

Research Reviews (Publications)
033 258 (1174)

Research Tools
035 514 (1280)

Retardation
038 260 (1349)

Retarded Readers
040 836 (1263)
063 097 (1306)
064 689 (1163)
067 620 (1176)

Retention
064 656 (1333)

School Community Programs
055 749 (1391)

School Industry Relationship
054 528 (1321)

School Surveys
046 623 (1393)

Science Materials
051 975 (1273)

Science Tests
024 563 (1259)

Scores
052 230 (1226)

Second Language Learning
061 805 (1328)

Secondary Education
071 059 (1203)

Secondary Grades
022 622 (1238)
064 325 (1315)

Secondary School Students
019 037 (1225)
056 795 (1318)
062 459 (1340)

Sentence Structure
038 254 (1298)

Sex Differences
011 497 (1214)

Siblings
065 585 (1363)

Silent Reading
019 202 (1278)

Simulation
032 198 (1240)
054 917 (1390)

Skill Development
064 655 (1332)

Social Studies
069 700 (1220)

Socioeconomic Influences
041 976 (1285)
066 443 (1296)

Socioeconomic Status
022 634 (1265)
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